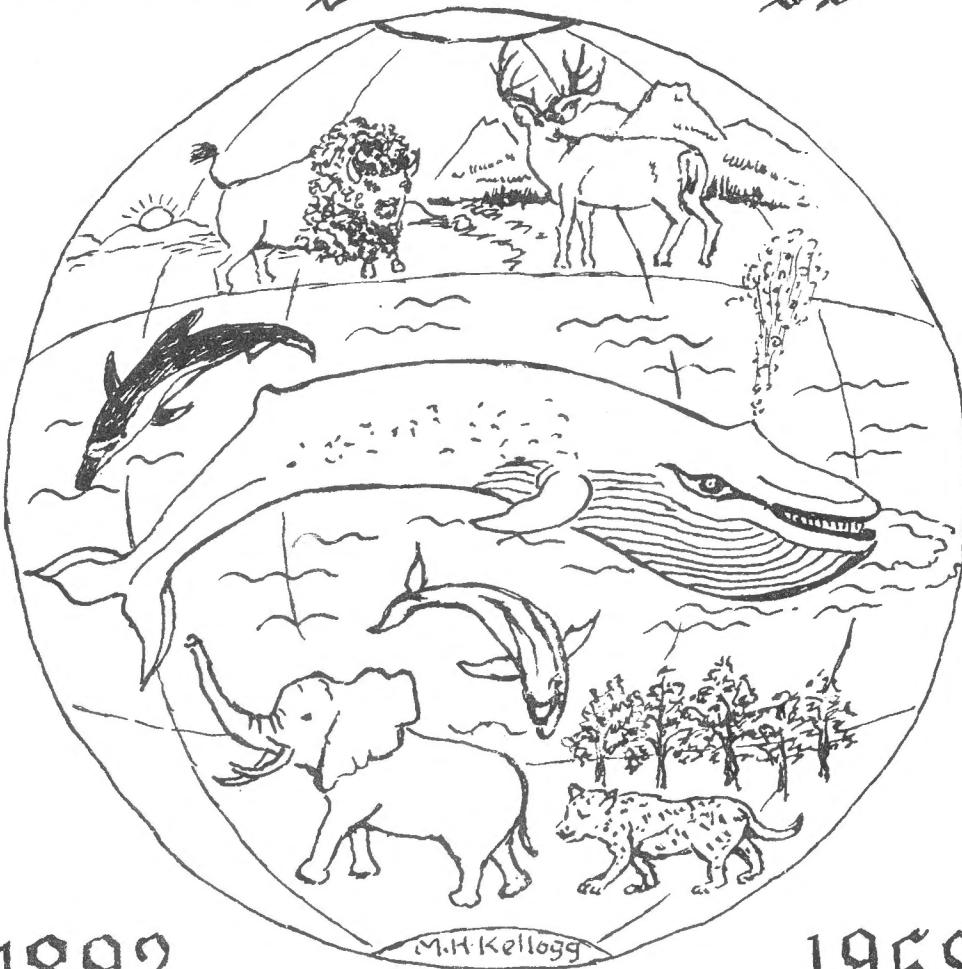






In Memory of  
Remington Kellogg



1892

1969



Mammalogist  
Paleontologist






















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Scientists Cliffs, Maryland  
January 1971









# THE MUSEUM OF

# NATURAL HISTORY.

WITH INTRODUCTORY ESSAY ON

## THE NATURAL HISTORY OF THE PRIMEVAL WORLD

BEING A POPULAR ACCOUNT OF THE  
STRUCTURE, HABITS, AND CLASSIFICATION OF THE VARIOUS DEPARTMENTS OF  
THE ANIMAL KINGDOM.

QUADRUPEDS, BIRDS, REPTILES, FISHES, SHELLS, AND INSECTS.

INCLUDING THE INSECTS DESTRUCTIVE TO AGRICULTURE.

BY

SIR JOHN RICHARDSON, C.B., F.R.S. Lond., Hon. F.R.S. Edin.,  
Author of the *Fauna Boreali Americana*; Arctic Search after Sir John Franklin.

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St. Mary's Hospital, London.

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*Cyclopædia of the Natural Sciences*, &c.

& ADAM WHITE, Esq.,  
Author of popular *Treatises on Zoology*,  
*Insects*, *Crustacea*, &c.

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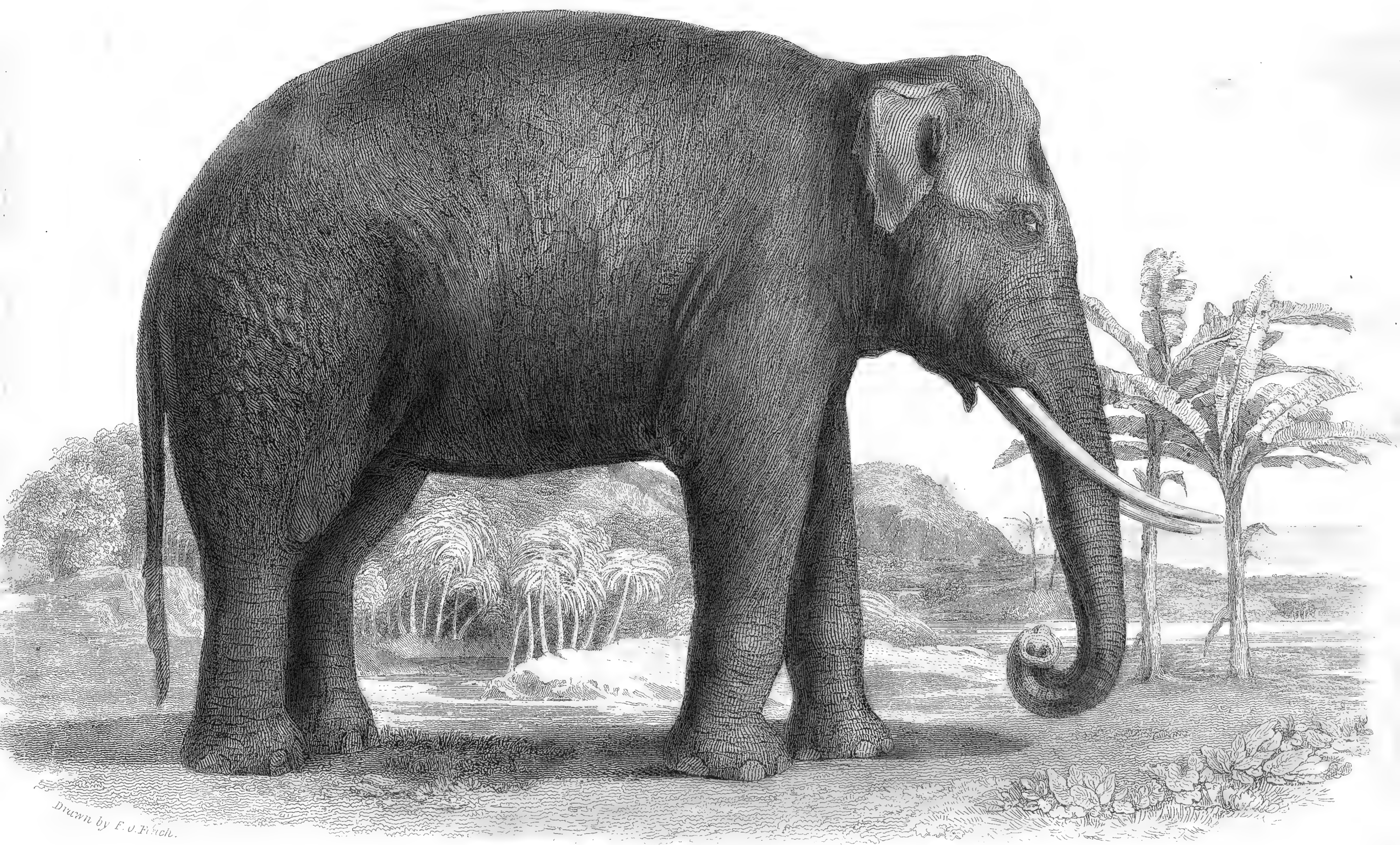
H. LEIGHTON SCULPT.







THE  
MUSEUM  
OF  
NATURAL HISTORY.



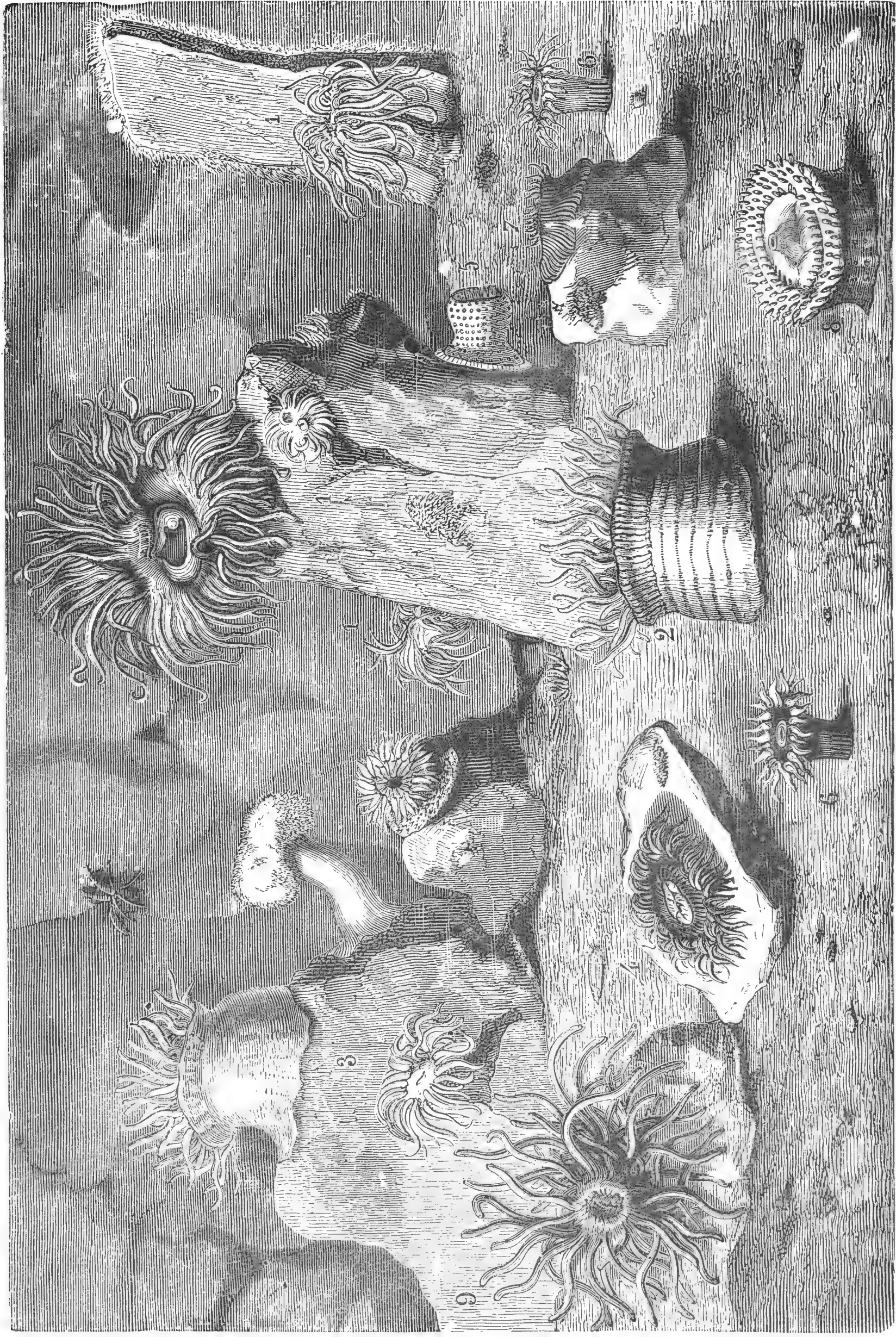
*Elephantus indicus. Indian Elephant.*

WILLIAM MACKENZIE.  
LONDON, GLASGOW, & EDINBURGH

1869  
C.1  
V.1  
SCHUBB







Sea Anemones.

- 1 2 3. *A. sulcata*. 4. *Phymactis sanctæ Helenæ*. 5. *Actinia capensis*. 6. *A. Peruviana*. 7. *A. sanctæ Catherinæ*. 8. *A. amethystina*. 9. *Comactis viridis*.





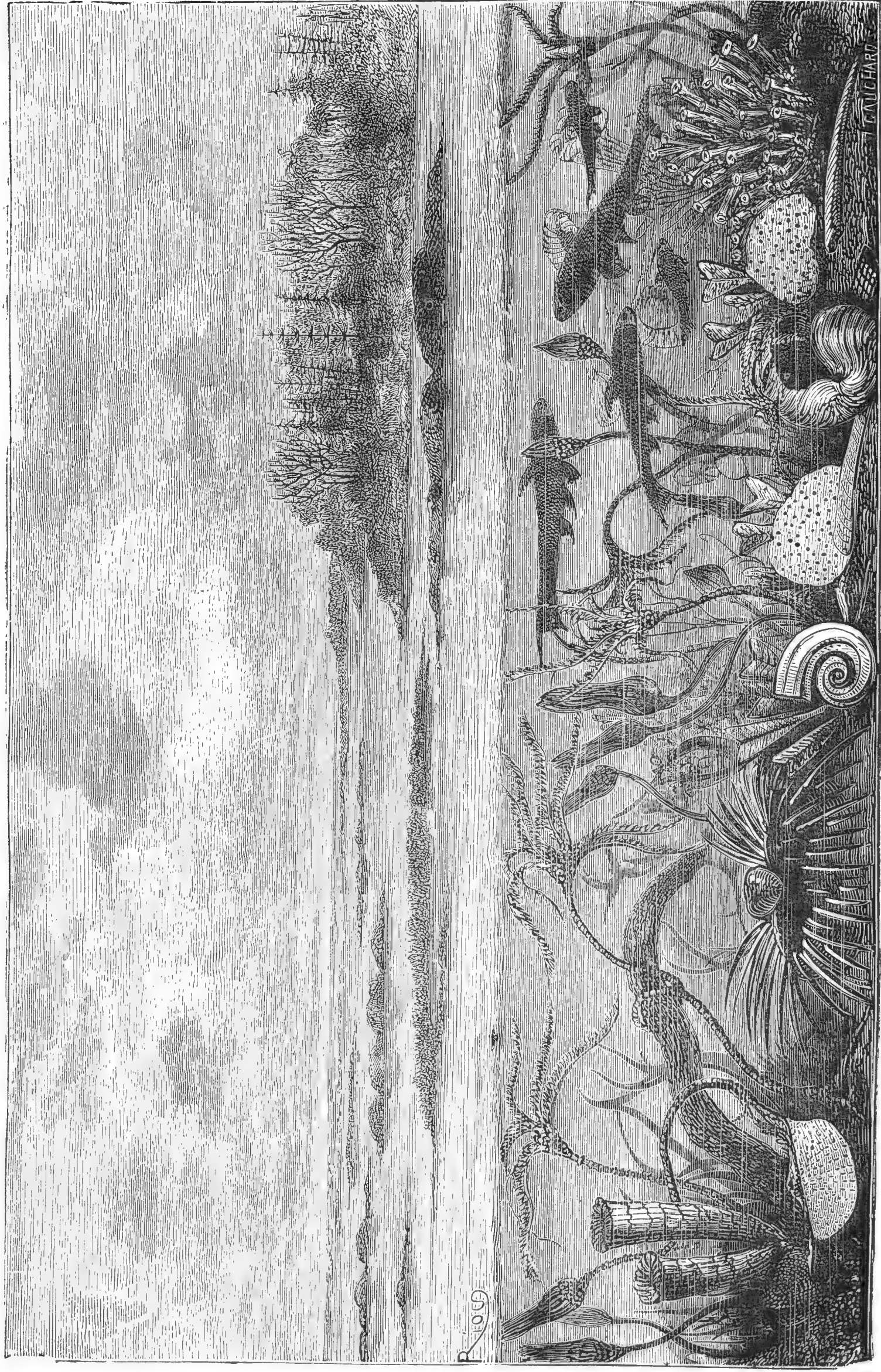


Plate 1.—Ideal view of marine life in the Carboniferous Period.





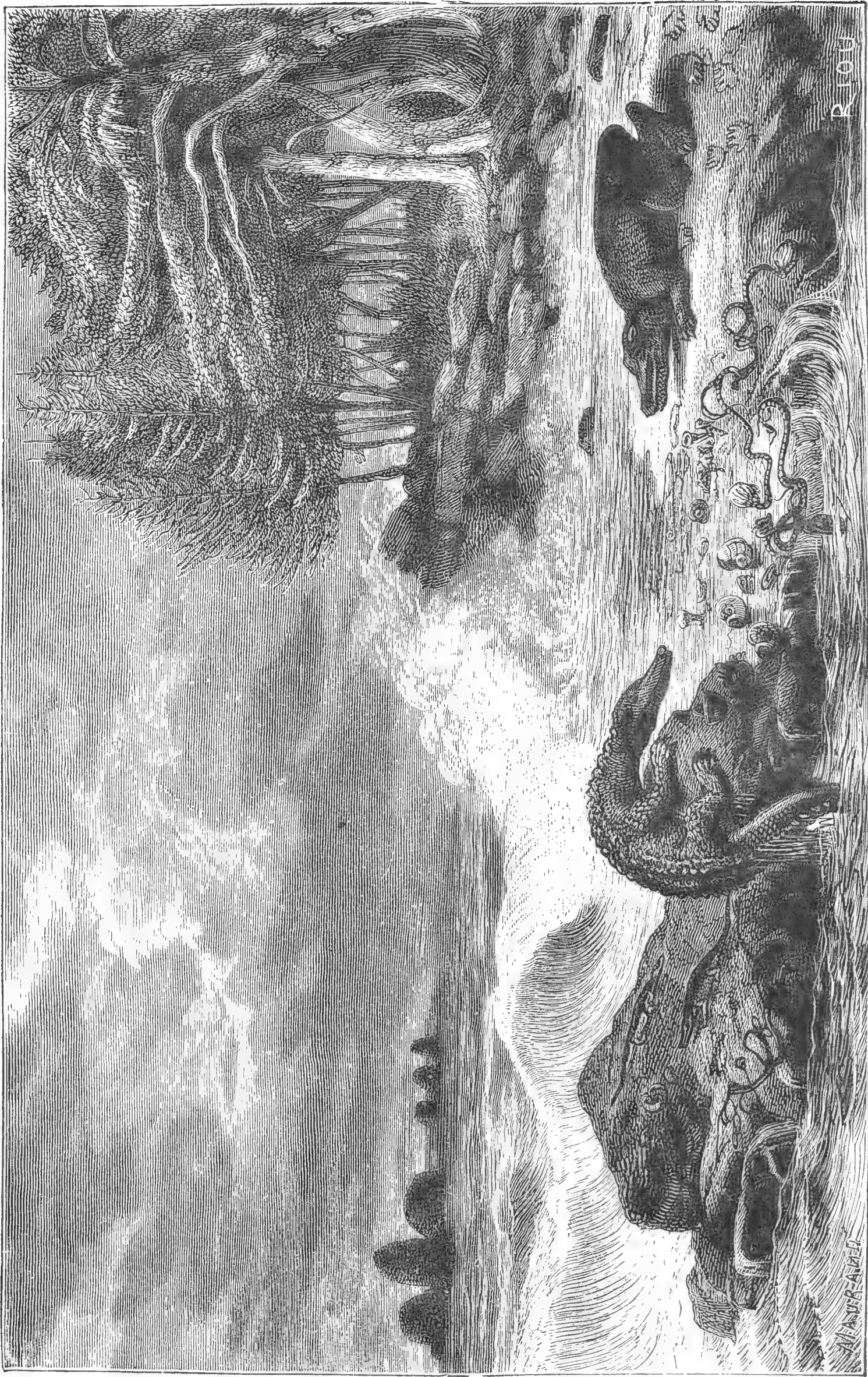


Plate 2.—Ideal landscape of the Muschelkalk Sub-period.





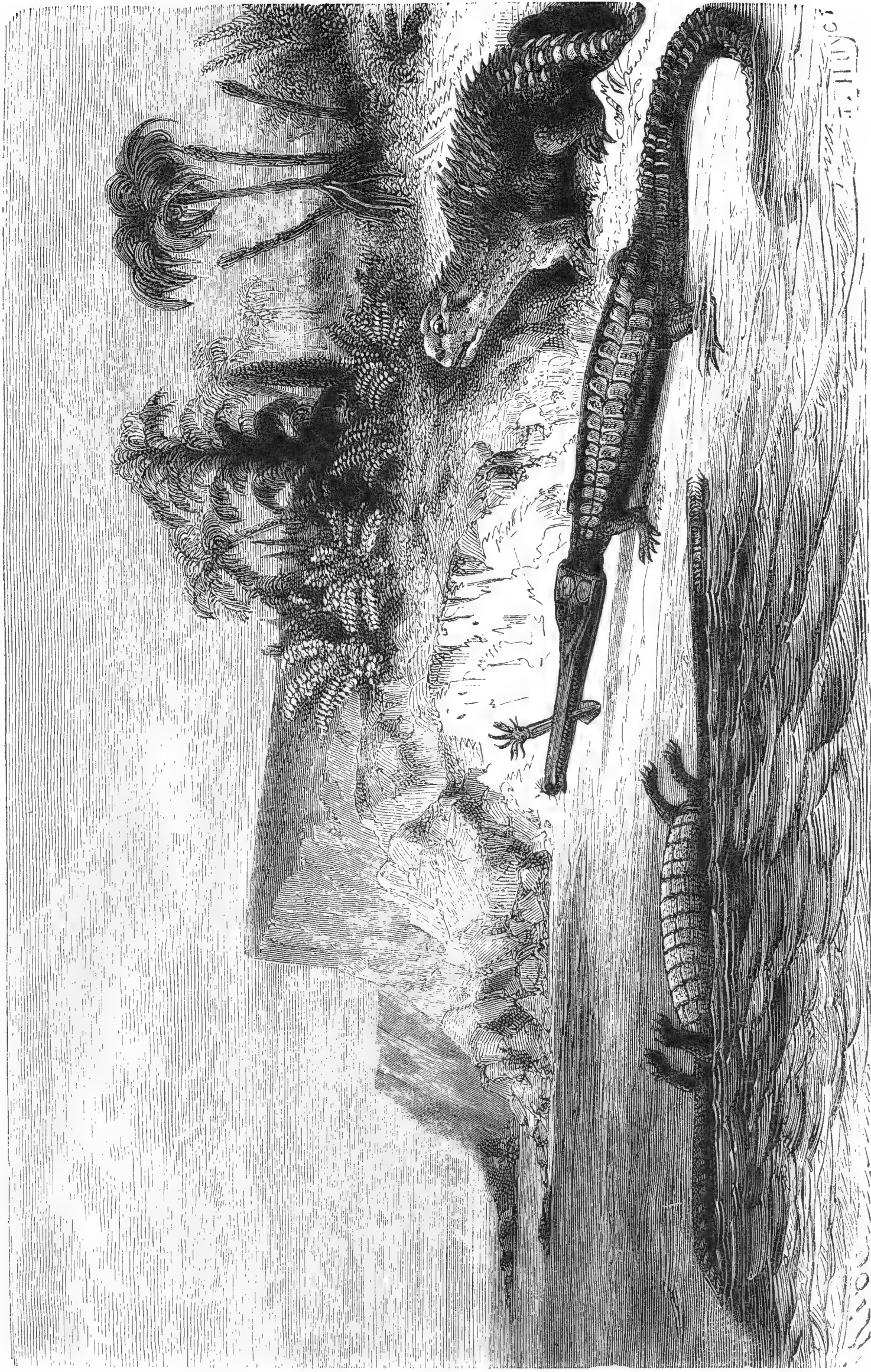


Plate 4.—Ideal landscape of the Middle Oolitic Period.





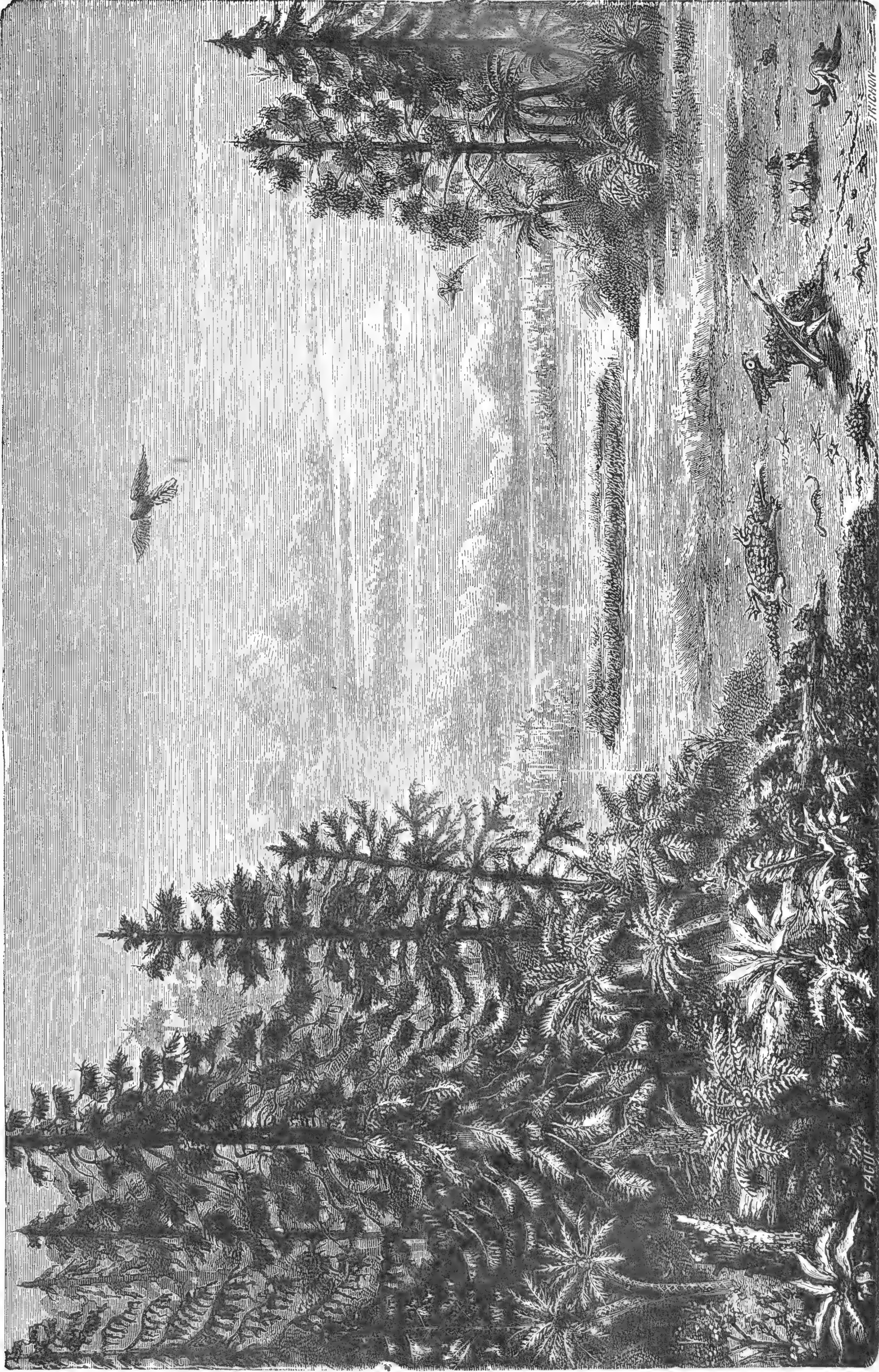


Plate 5.—Ideal landscape of the Upper Oolitic Period.







Plate 6.—Ideal landscape of the Lower Oolite Period.







Plate 7.—Ideal scene in the Lower Cretaceous Period, with Iguanodon and Megalosaurus.





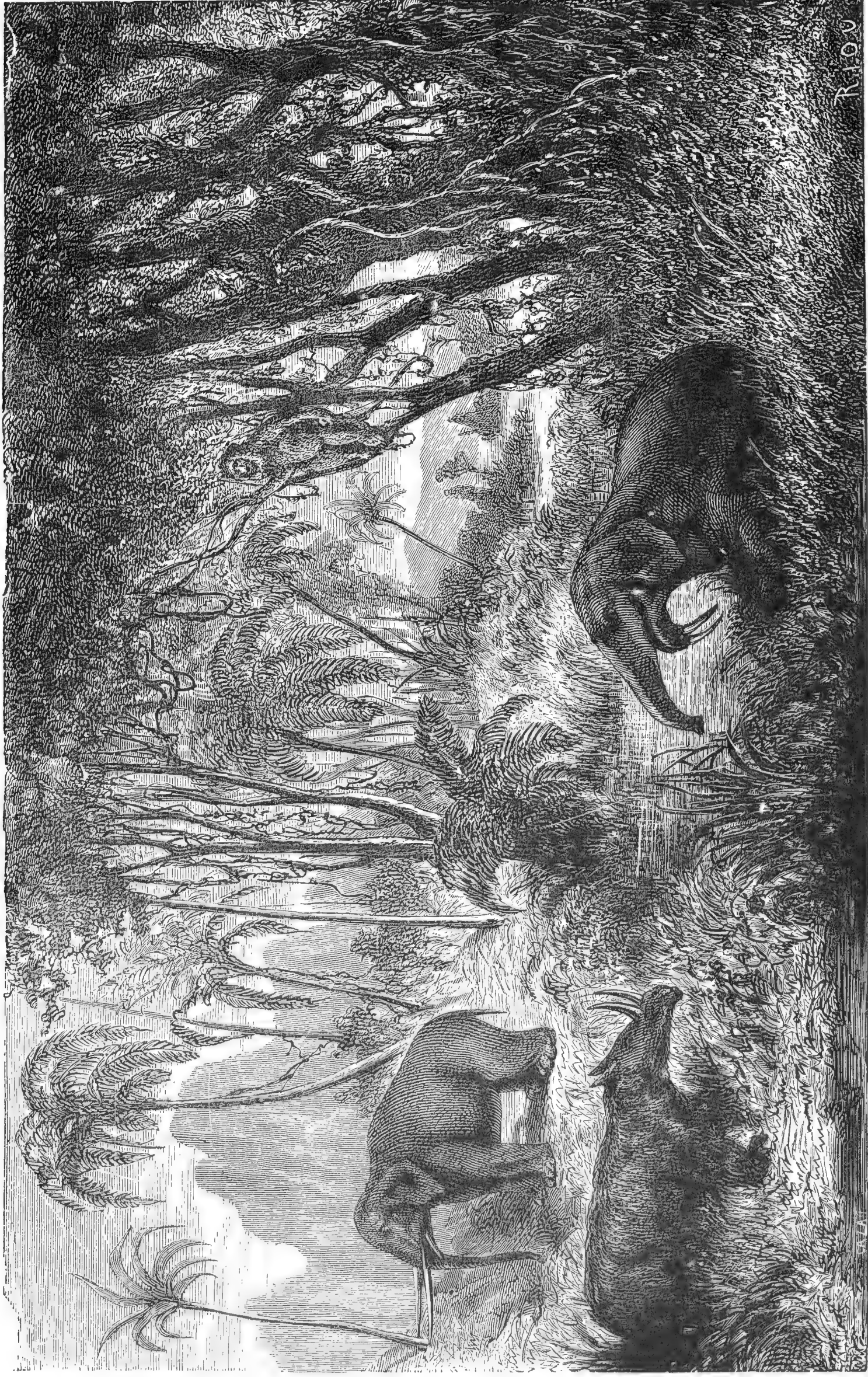


Plate 8.—Ideal landscape of the Miocene Period.







Plate 9. — Ideal landscape of the Pliocene Period.





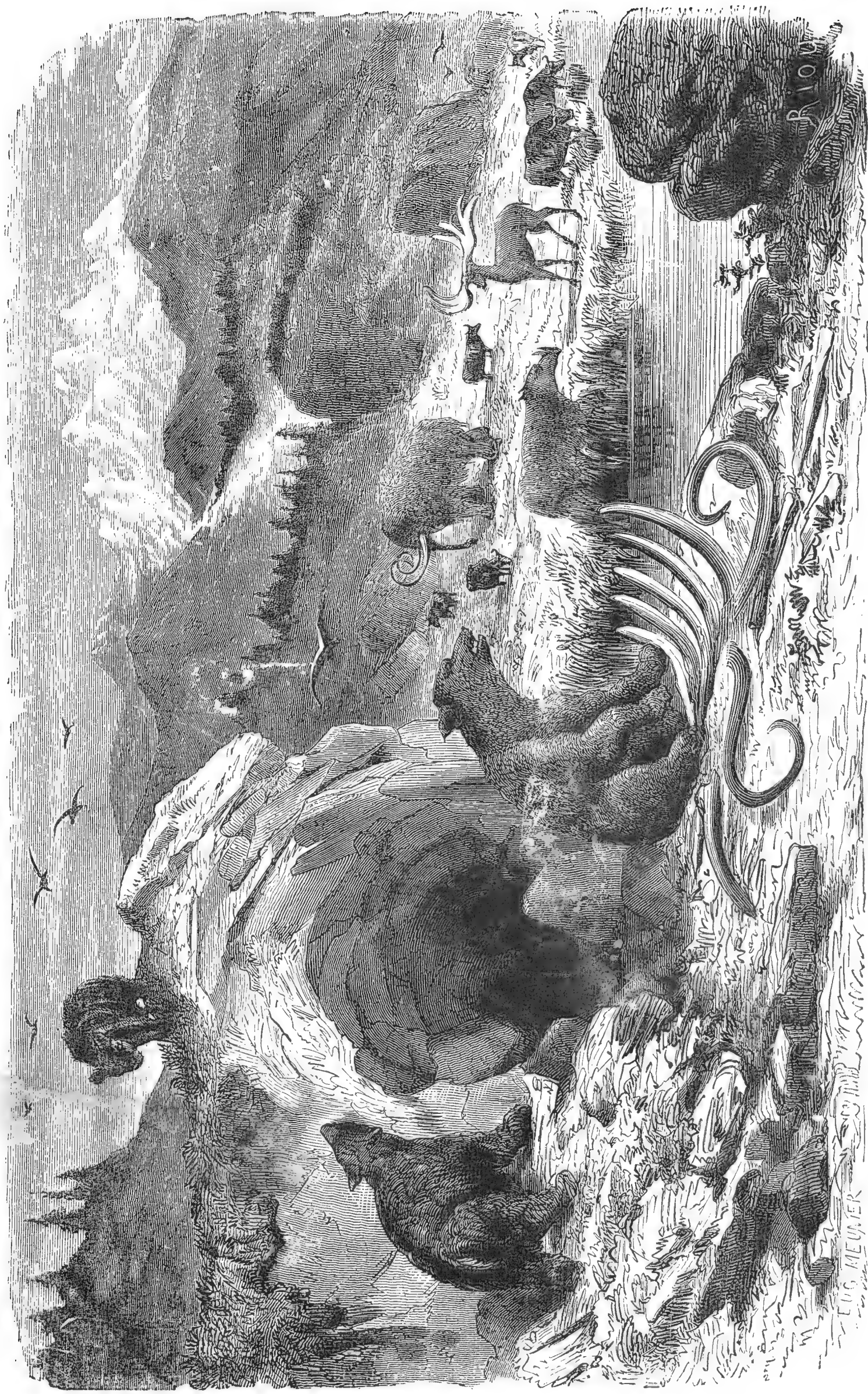


Plate 10.—Ideal European landscape in the Quaternary Epoch.





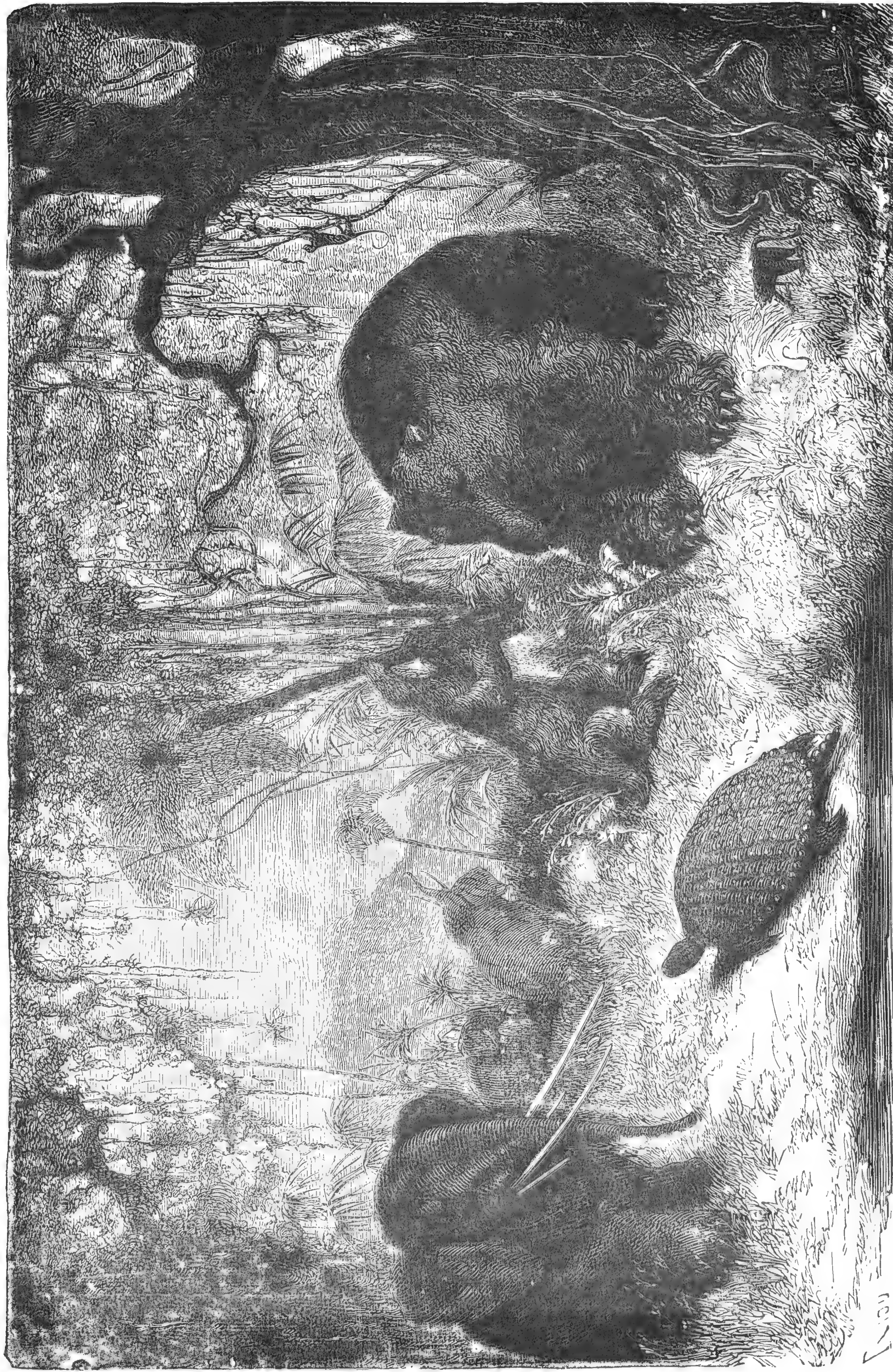


Plate 11.—Ideal American landscape in the Quaternary Epoch.







Fishing for Tunny at Madrigue, on the Coast of Provence.





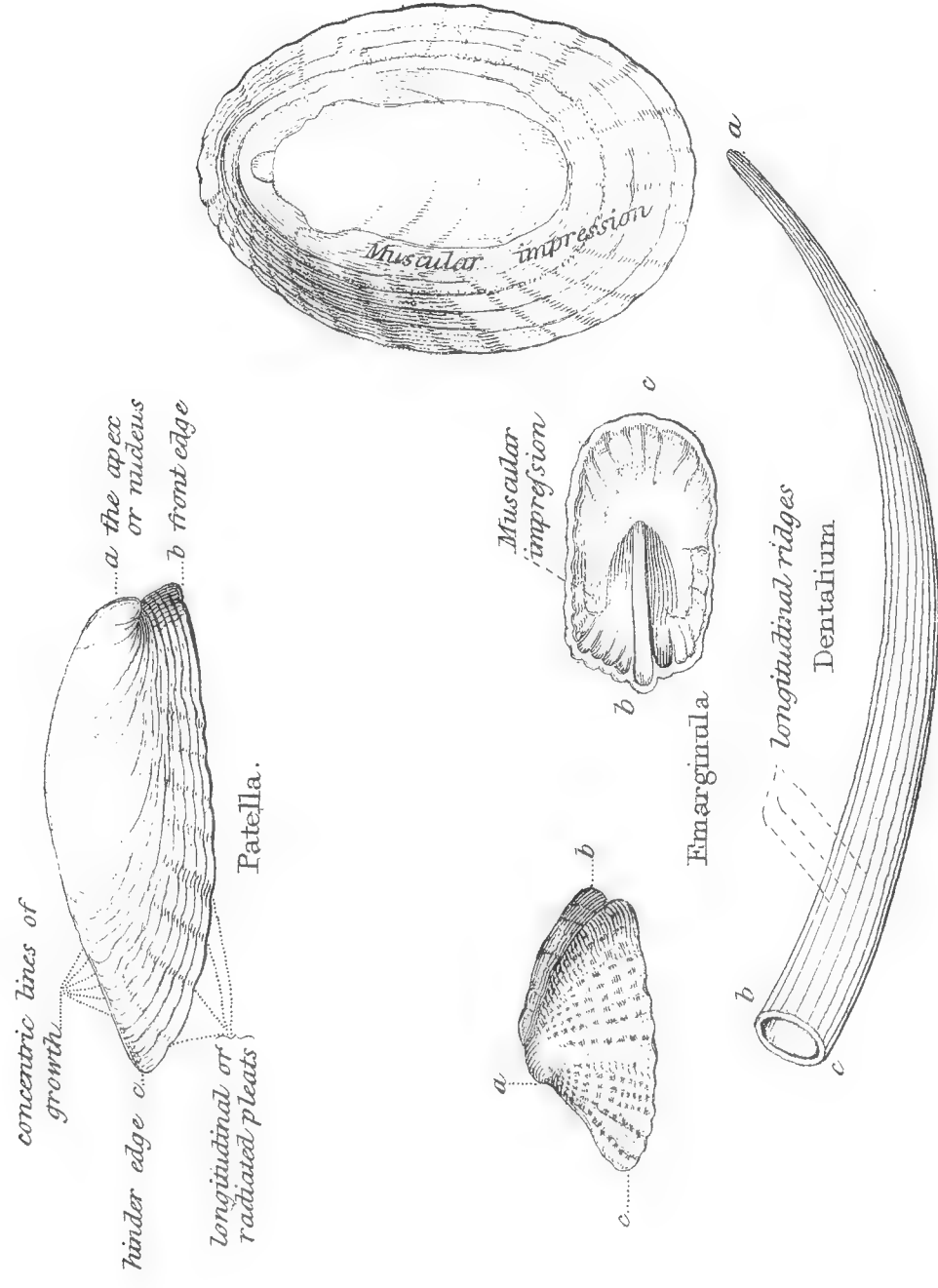
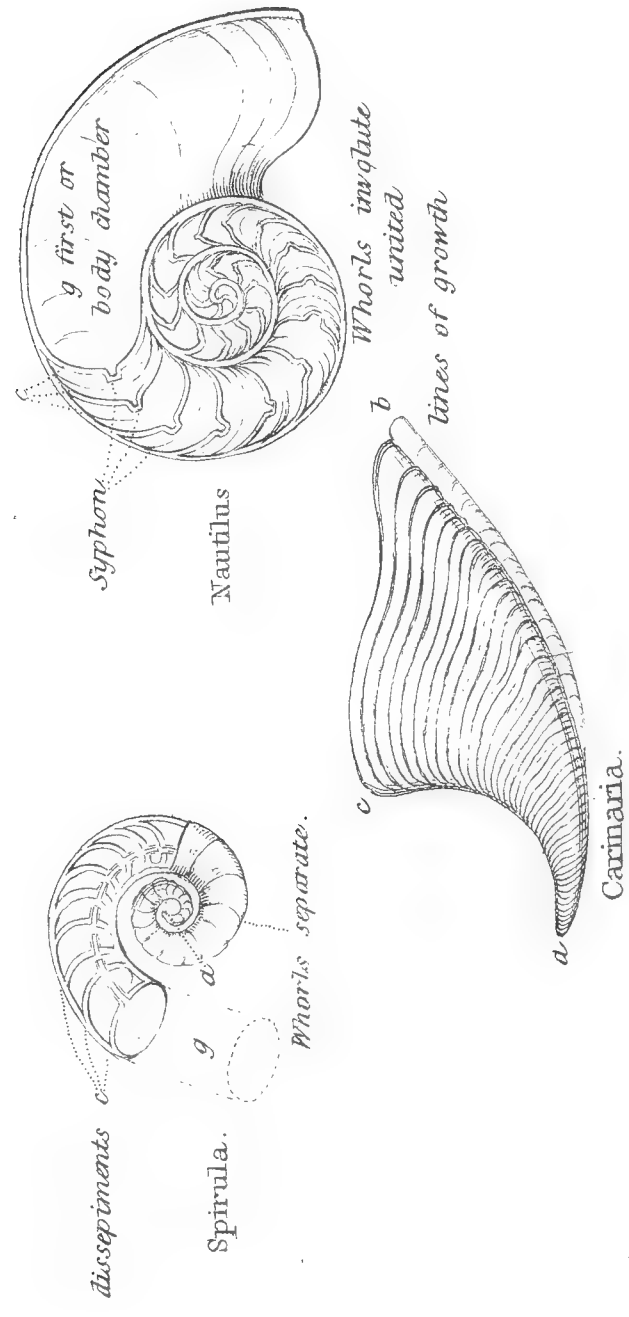


Fishing for Electrical Eel (*Gymnotus*) on the Orinoco.

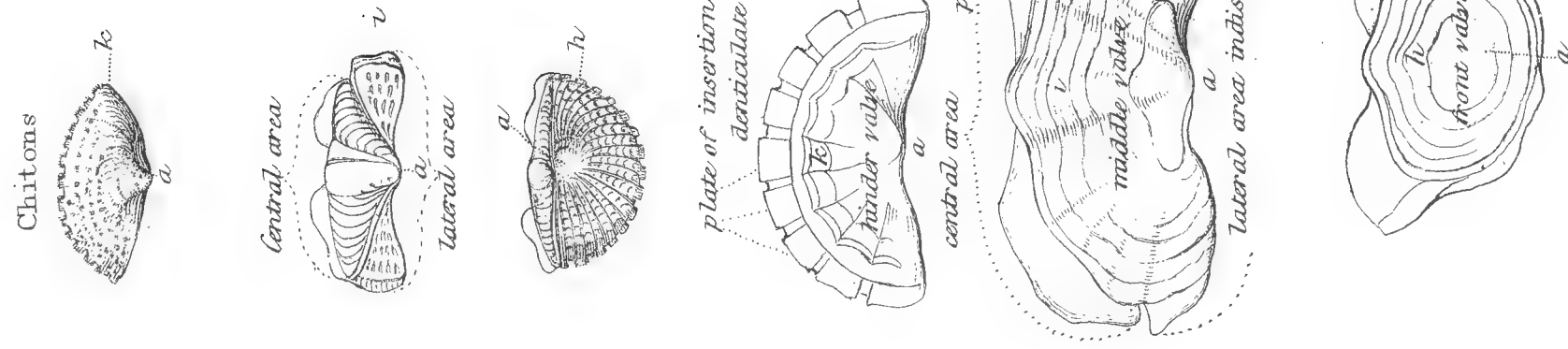




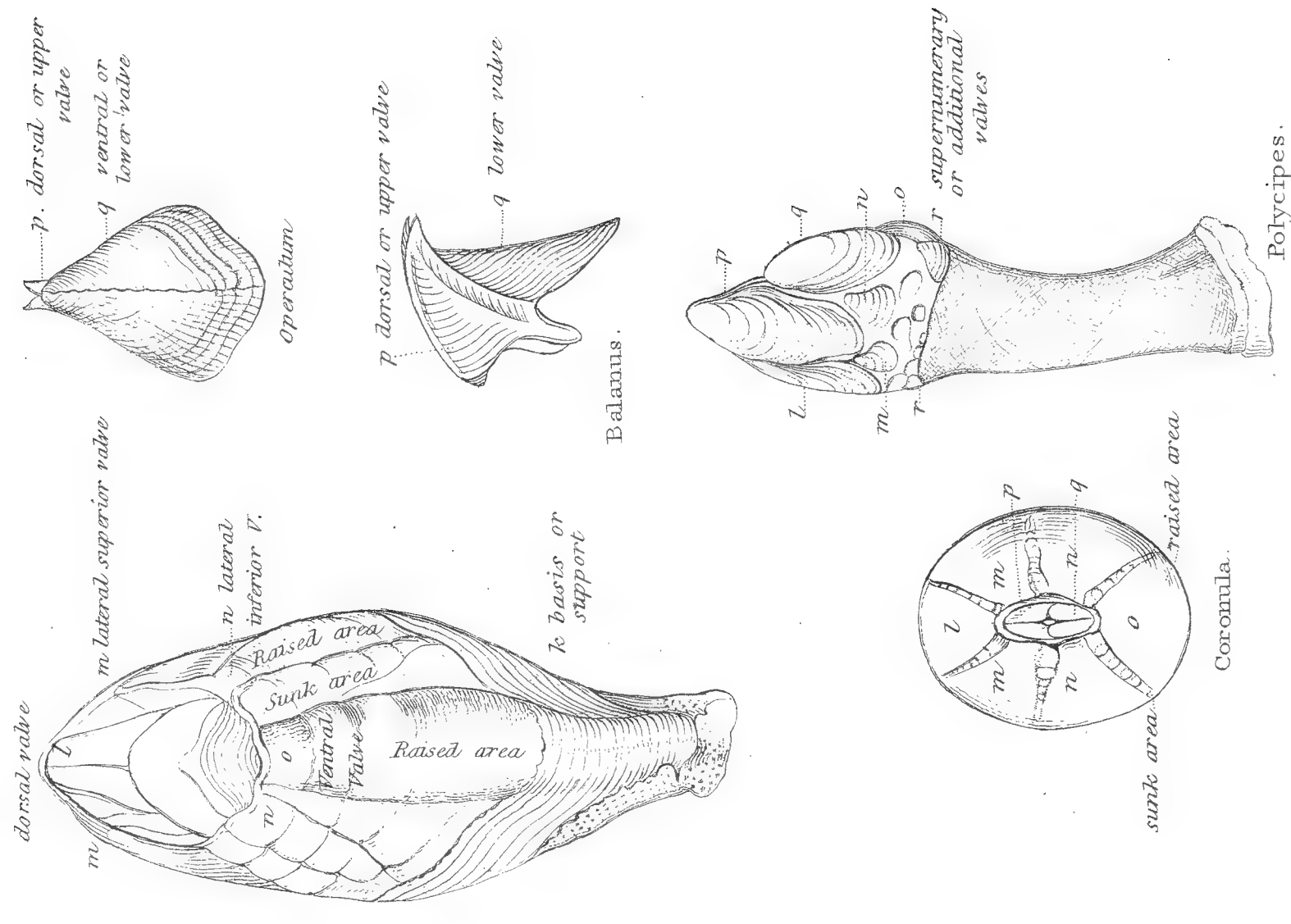
SYMMETRICAL UNIVALVES.



SERIAL MOLLUSCA.



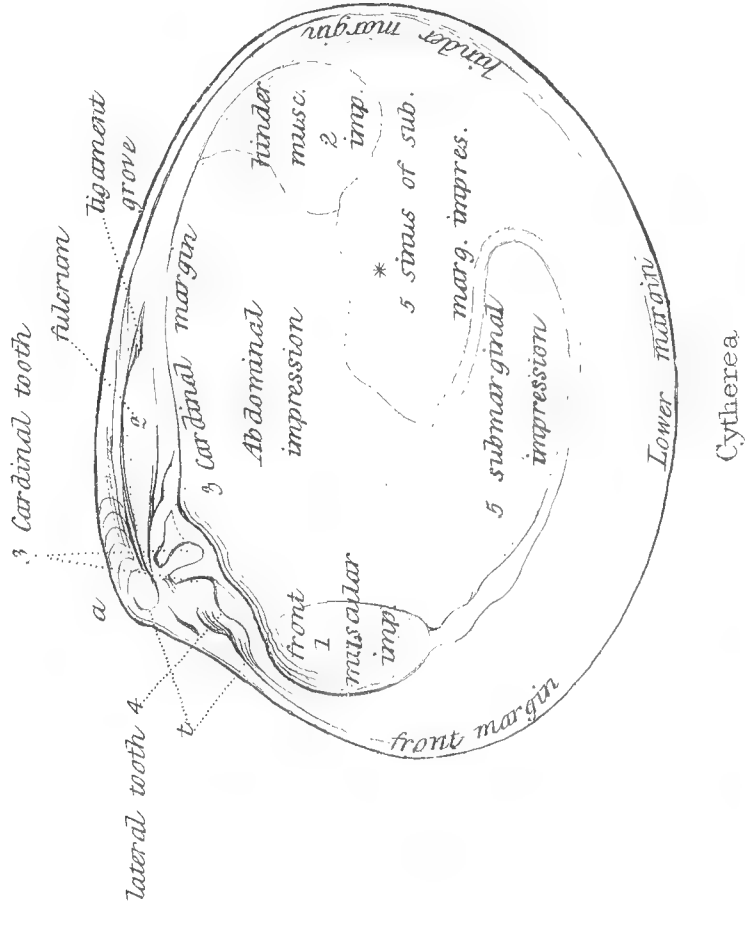
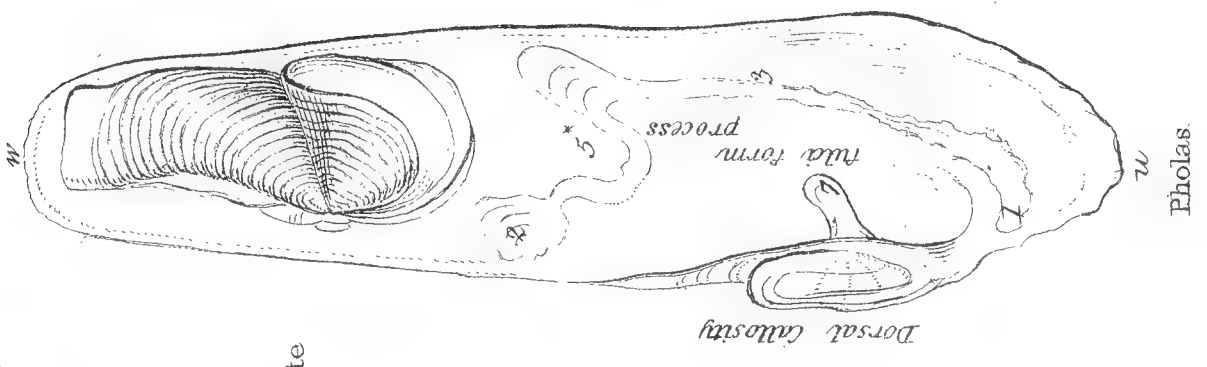
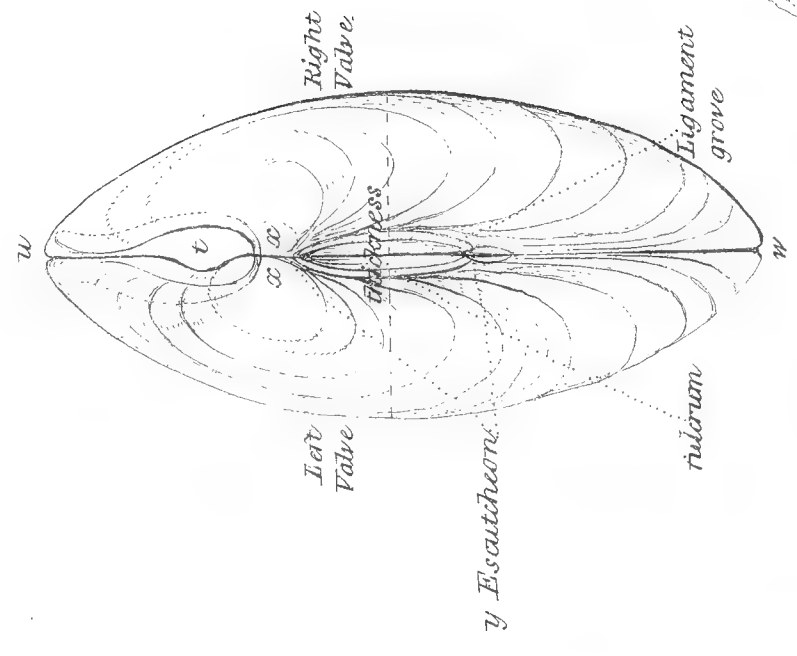
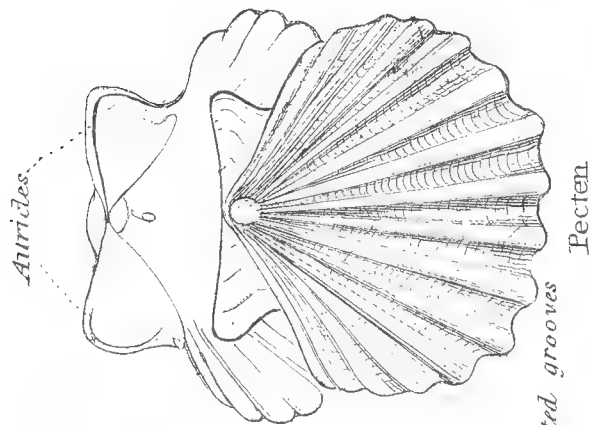
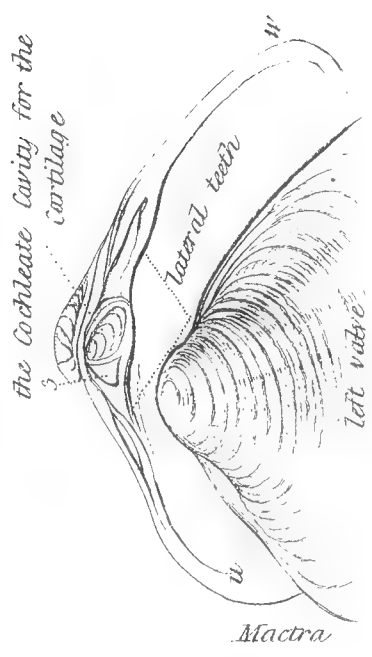
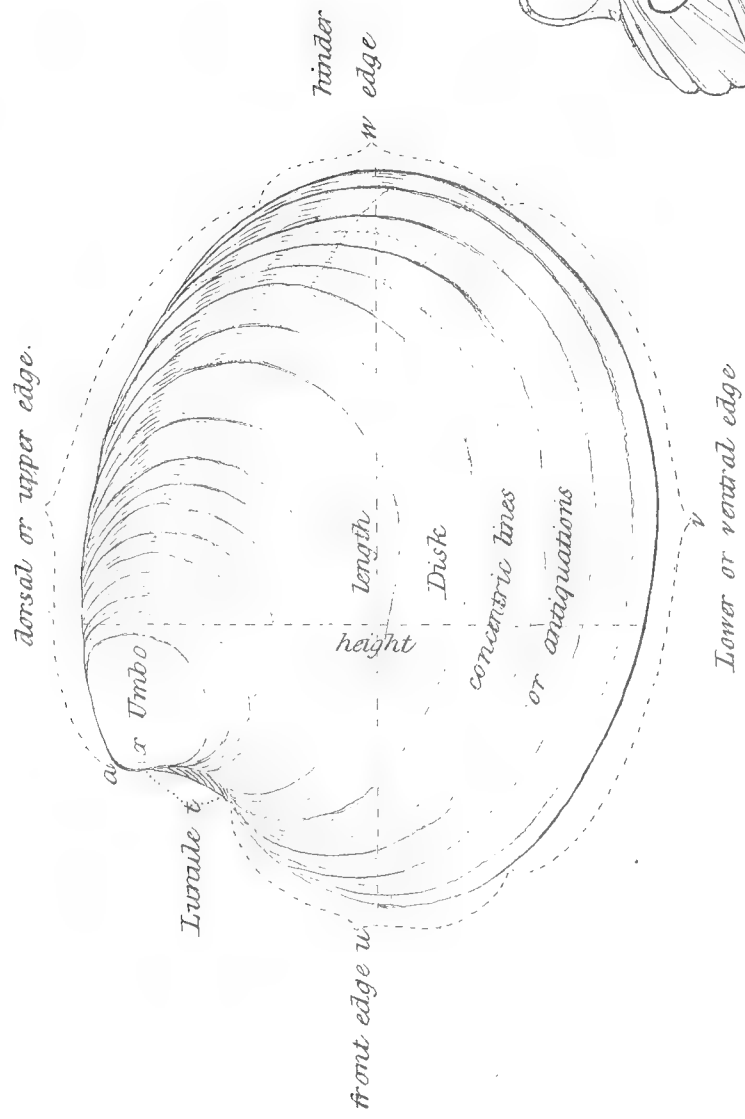
CIRRHIPEDS (CRUSTACEÆ)



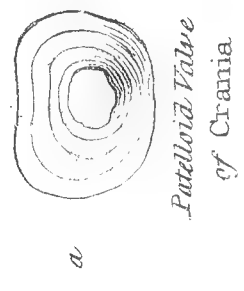
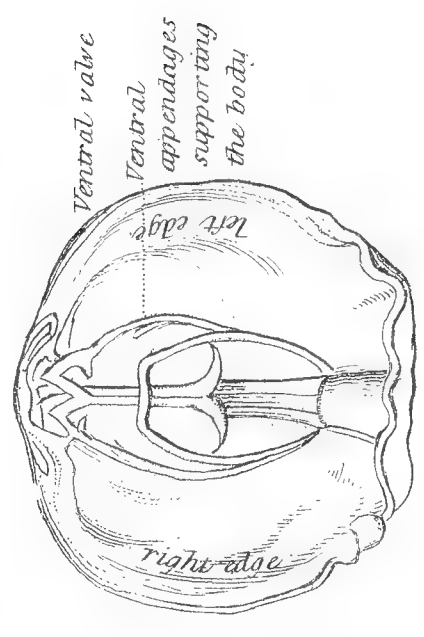
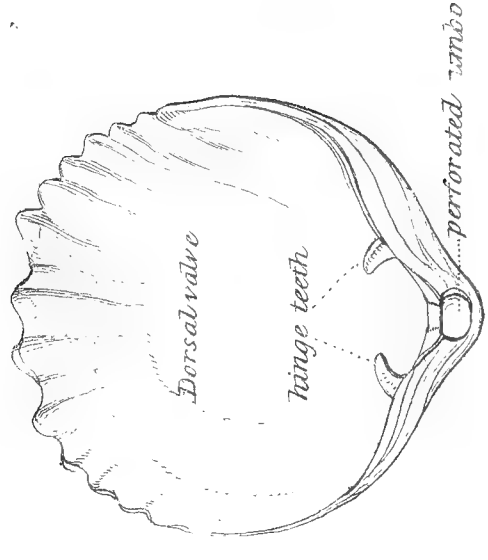
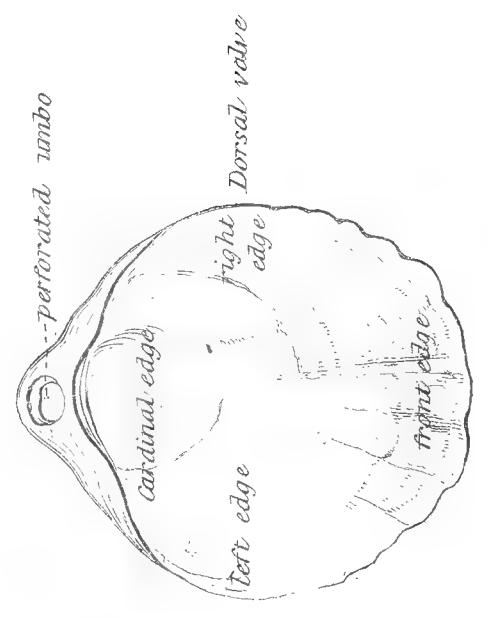
N.B. a. Summit or nucleus. b. Margin of mouth or Peristome. c. The inner or columella tip. d. Outer lip. e. Front edge. f. Hinder edge of mouth. g. The hollow axis or umbilicus. h. Spire. i. First whorl. l. Suture. m. Muscular impression. n. Longitudinal slit. o. Columella. p. Dissepiment between the whorls. N. The Parts of the various shells having the same number or letter are similar.



BIVALVE SHELLS.



LAMP-LIKE SHELLS.



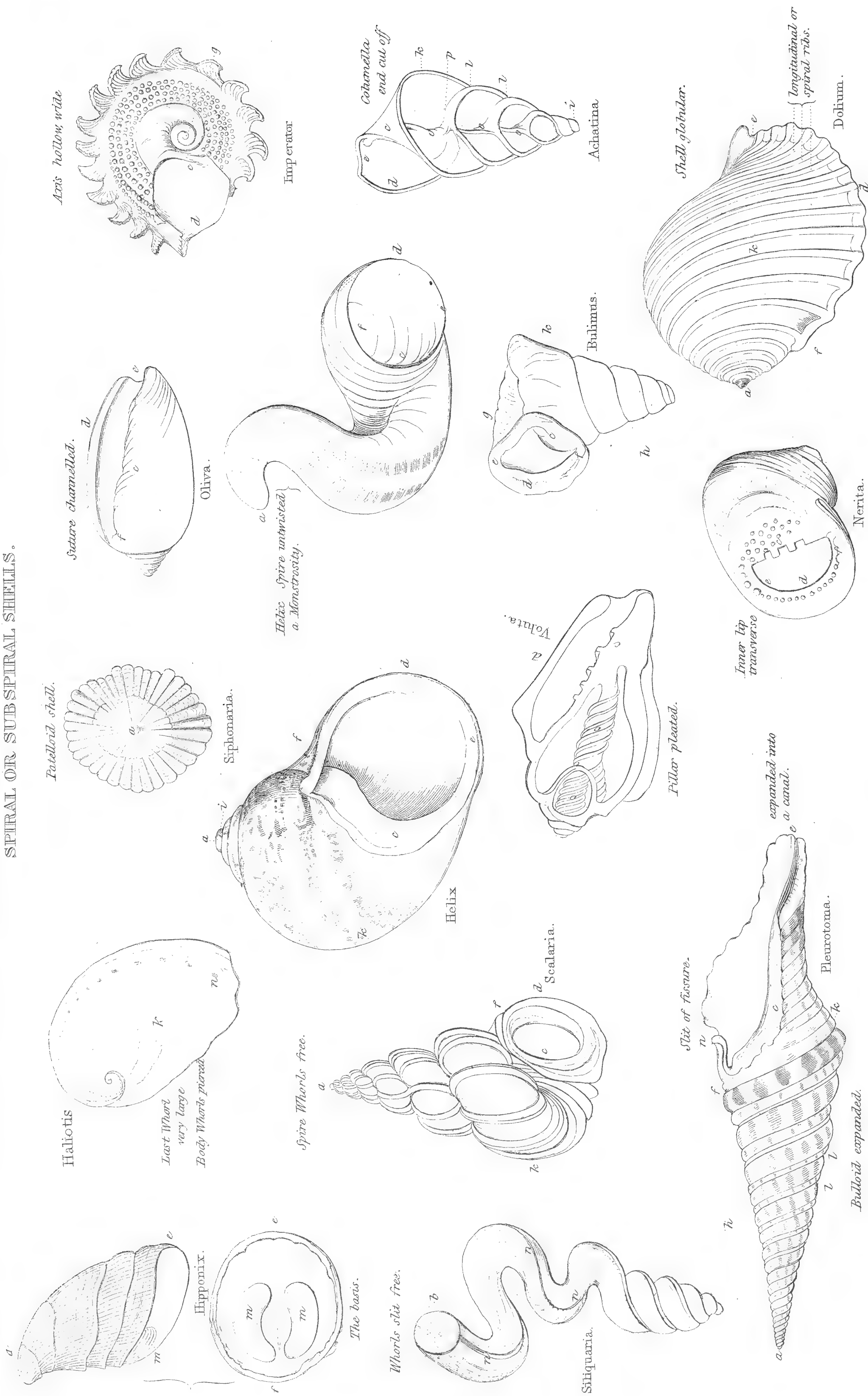
N.B. a. Summit or nucleus. b. Margin of mouth or Peristome. c. The inner or columella lip. d. Outer lip. e. Front edge. f. Hind edge of mouth. g. The hollow axis or umbilicus. h. Spire. i. First whorl. k. Body whorl. l. Suture. m. Muscular impression. n. Longitudinal slit. o. Columella. p. Dissepiment between the whorls.

N. The Parts of the various shells having the same number or letter are similar.





SPIRAL OR SUBSPIRAL SHELLS.



N.B. a. Summit or nucleus. b. Margin of mouth or Peristome. c. The inner or columella lip. d. Outer lip. e. Front edge. f. Inner edge of mouth.  
g. The hollow axis or umbilicus. h. Spire. i. First whorl. k. Body whorl. l. Suture. m. Muscular impression. n. Longitudinal slit. o. Columella.  
p. Dissepiment between the whorls.

N. The Parts of the various shells having the same number or letter are similar.

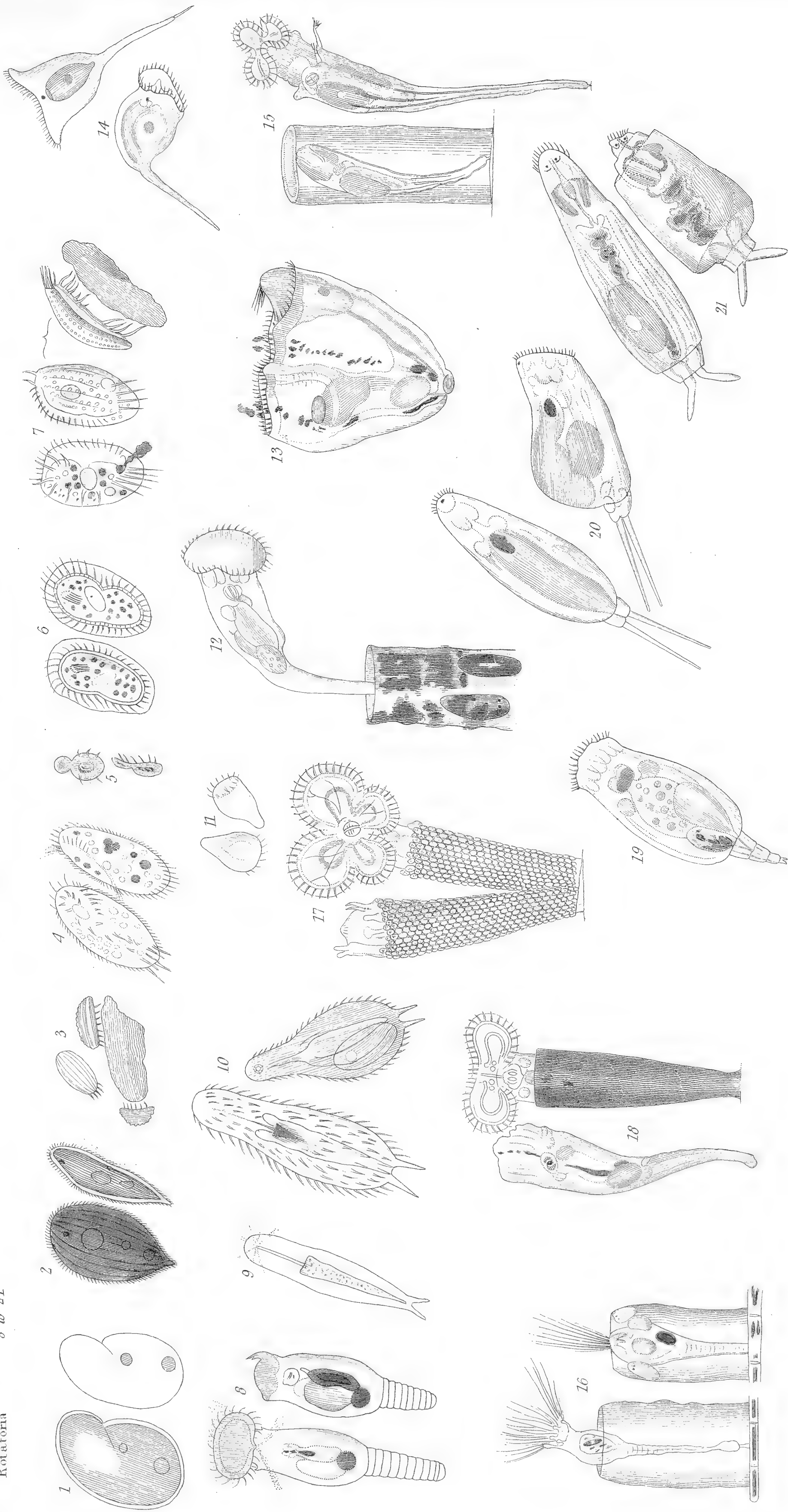




# INFUSORIA & ROTATORIA.

Order Infusoria  
 Rotatoria

Figs. 1 to 7.  
 8 to 21



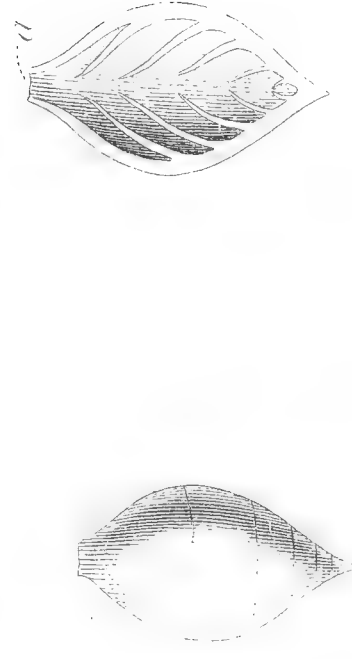
## GENERA AND SPECIES.

- |                               |                              |                              |
|-------------------------------|------------------------------|------------------------------|
| 1. Kolpoda, Ren.              | 11. Glenophora, Trochus.     | 16. Floscularia, Ornata.     |
| 2. Ophryoglena, acuminata.    | 12. Ecistes, Hyalinus.       | 17. Melicerta, Ringens.      |
| 3. Oxytricha, cicada.         | 13. Cyphonantes, Compressus. | 18. Limnias, Ceratophylli.   |
| 4. Stylonychia, Fastulata.    | 14. Microcodon, Clavus.      | 19. Hydatina, Brachydactyla. |
| 5. Discocephalus, Rotatorius. | 15. Tubicolaria, Naja.       | 20. Furcularia, Gibba.       |
|                               | 21. Diglena, Grandis.        |                              |

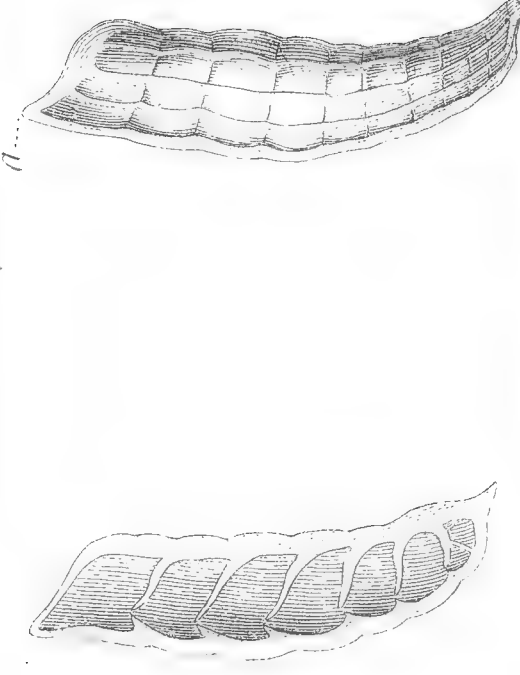


Order Foraminifera.

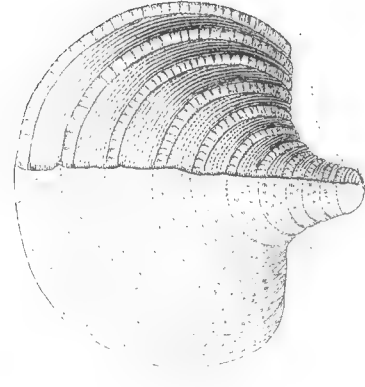
Fam. Nodosoriadæ.



1 *Nodosaria laqueata*.

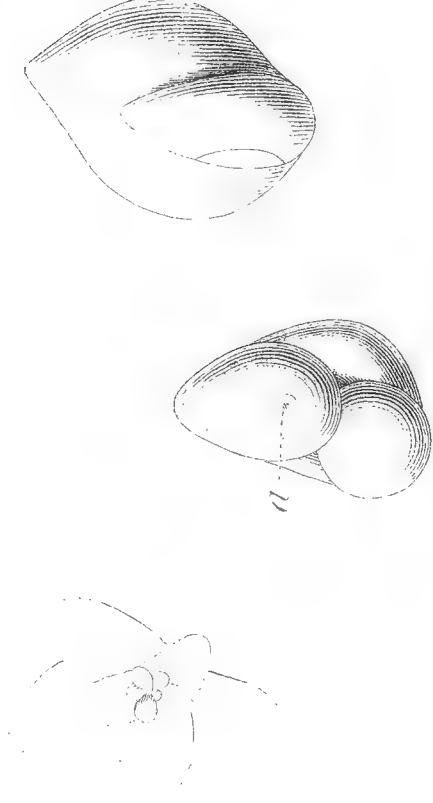


2 *Margarina Rhipans*

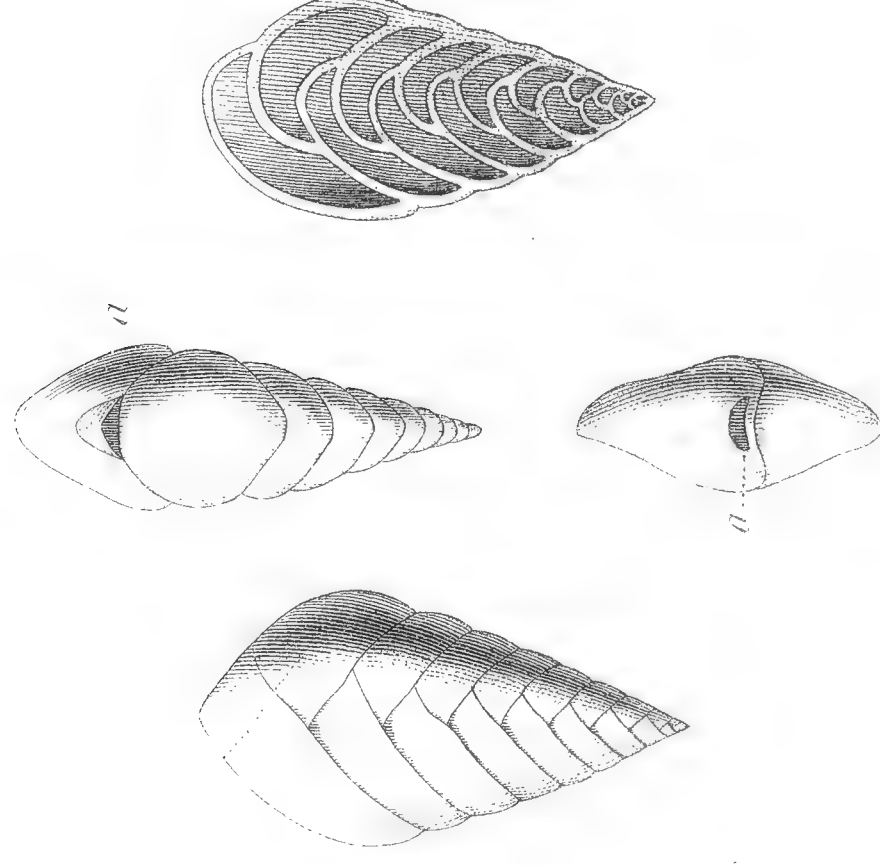


3 *Eponina flabelliformis*.

Fam. Textulariadæ.

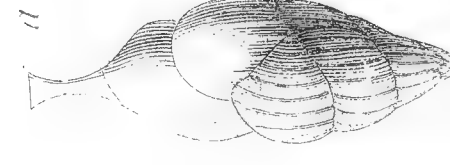


4 *Polymorphina communis*.

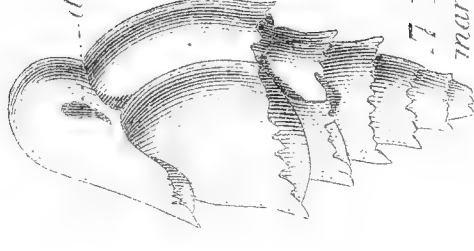


5 *Textularia aciculata*.

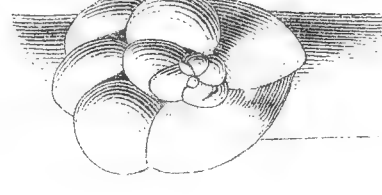
Fam. Rotaliadæ.



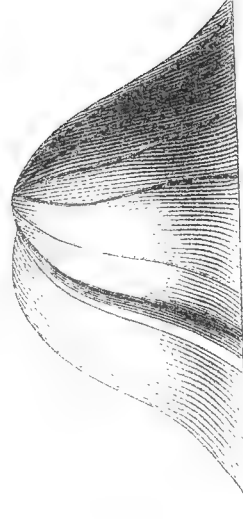
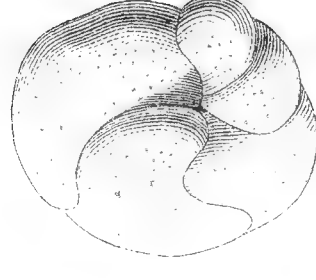
6 *Uvigerina pygmaea*.



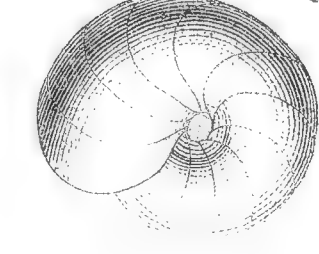
7 *Bulinina marginata*.



8 *Rosalina globularis*.



9



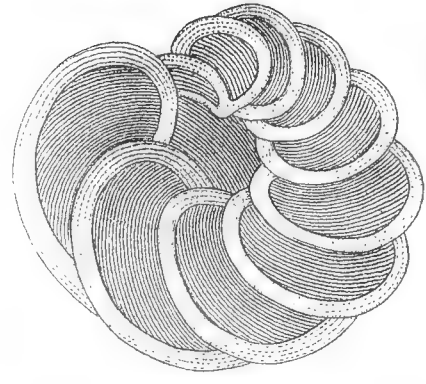
9 *Truncatula rudgens*.

NOTE.—All these shells being very small, they are all more or less magnified, in all the figures, a, represents the mouth, and the dotted lines represent the theoretical form of the cells.

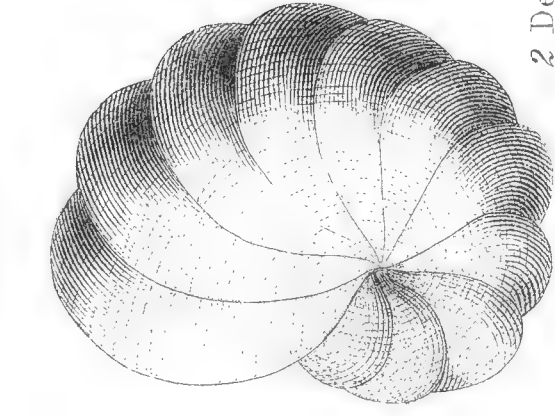




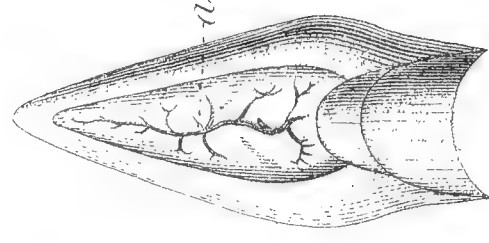
Fam. Polystomelladæ.



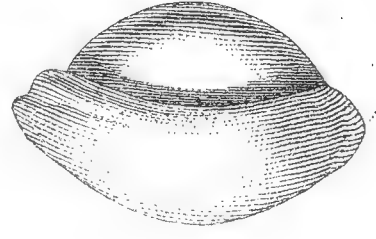
1 *Planulina areninensis*.



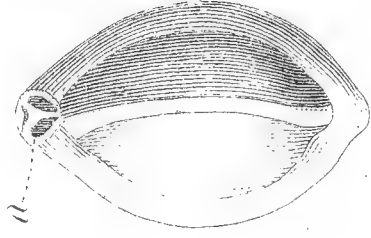
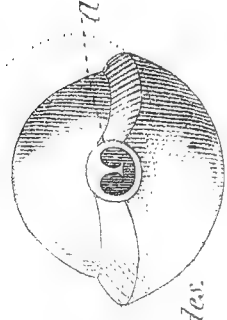
2 *Dendritina arbuscula*.



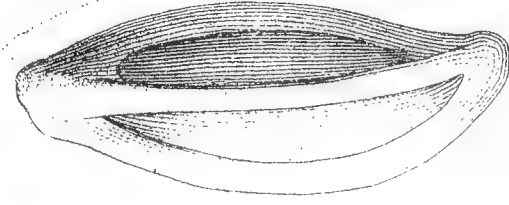
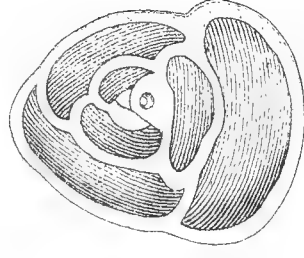
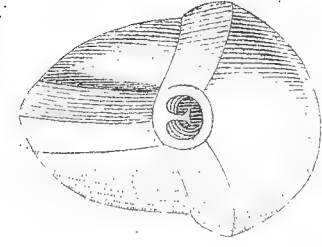
Fam. Miliolidæ.



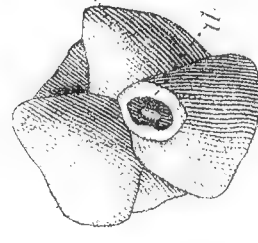
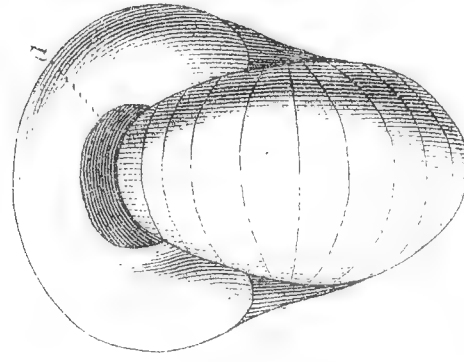
4 *Biloculina bulloides*.



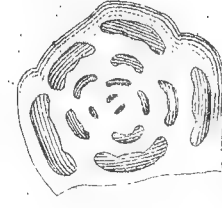
5 *Triloculina trigonula*.



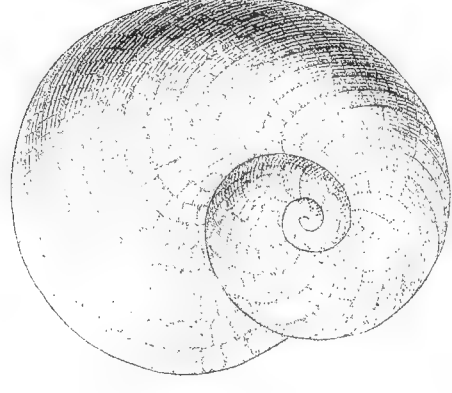
3 *Nonionina umbilicata*.



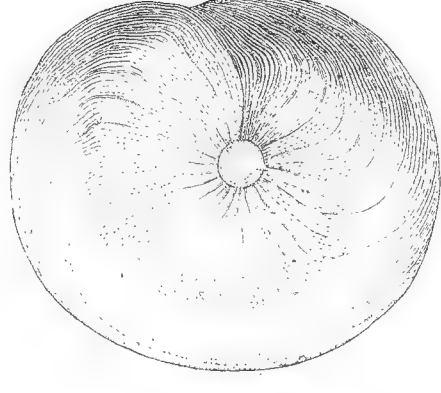
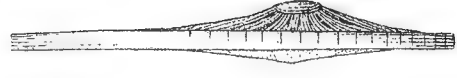
6 *Quinqueloculina saxorum*.



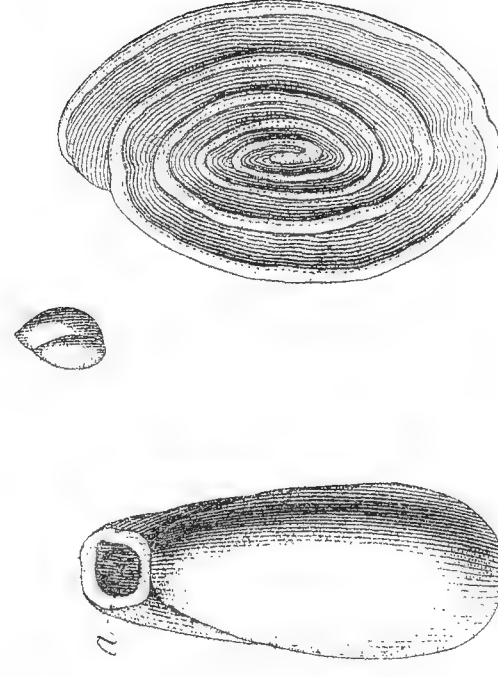
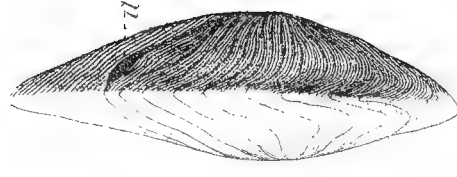
Fam. Orbiculinadæ.



7 *Heterostegina depressa*.



8 *Amphstegina Quoyi*.

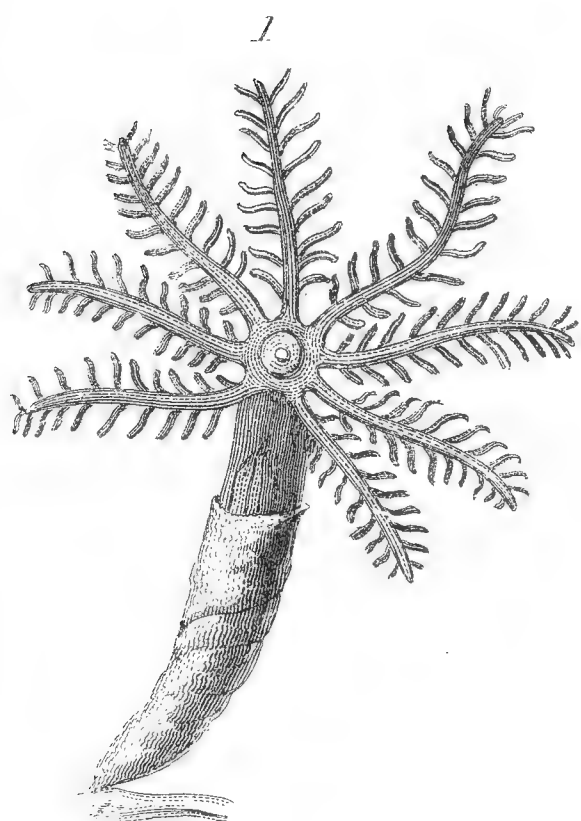


9 *Fabularia discoliths*.

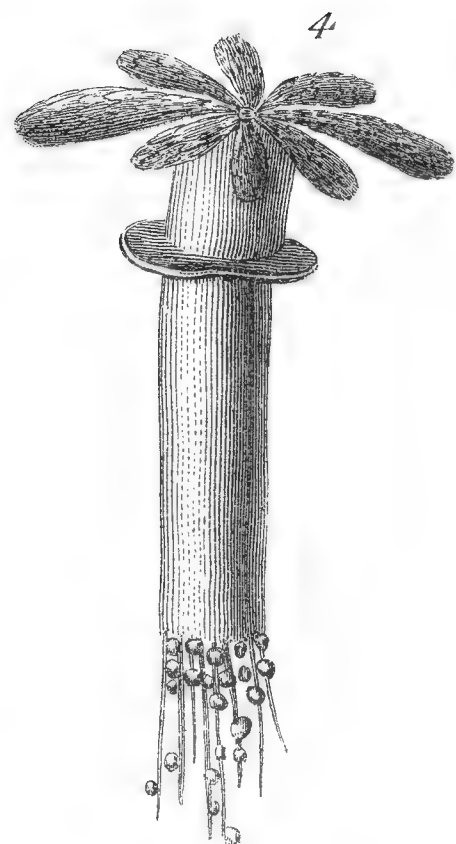
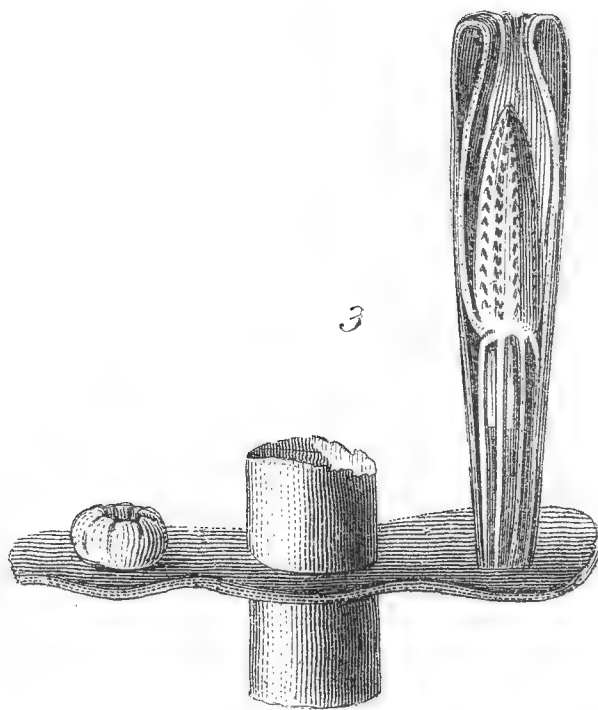
NB. All these shells being very small, they are all more or less magnified, in all the figures, *a*, represents the mouth, and the dotted lines, represent the theoretical form of the cells.



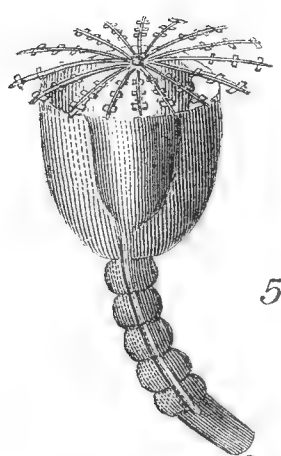




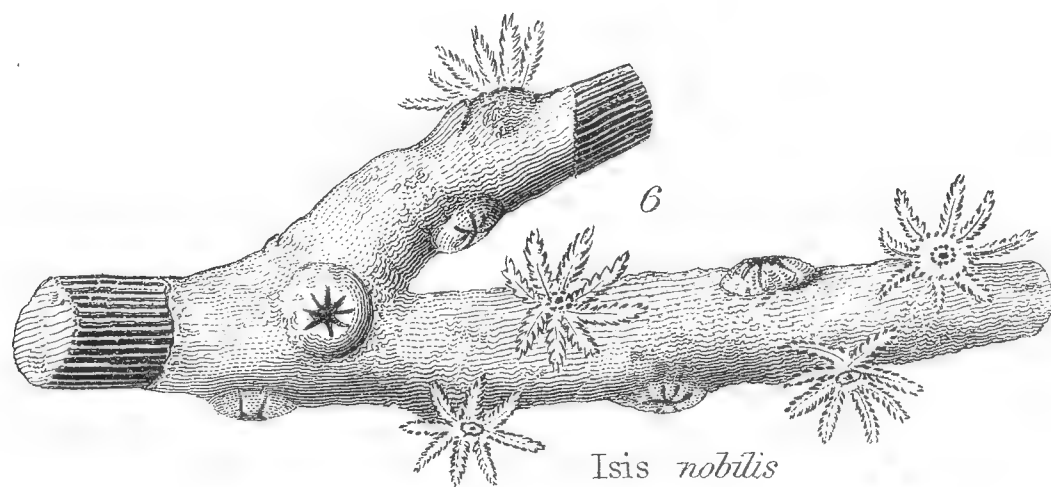
*Cornularia (rugosa) rosea.*



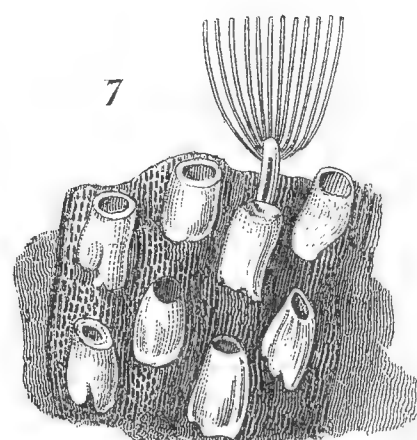
*2.3 and 4. Tubipora musica*



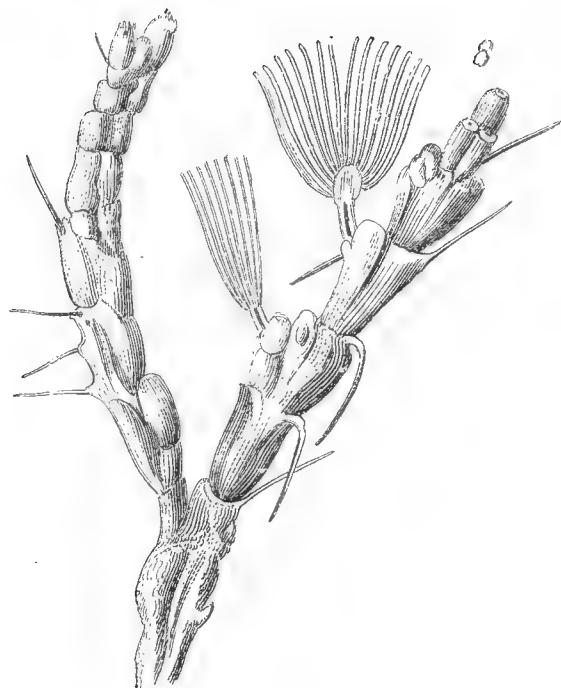
*Tubularia clytoidea.*



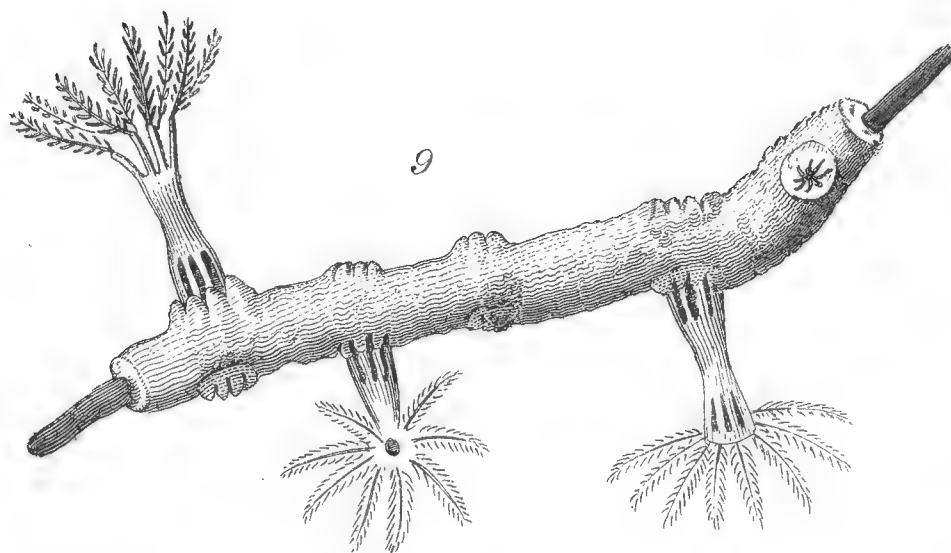
*Isis nobilis*



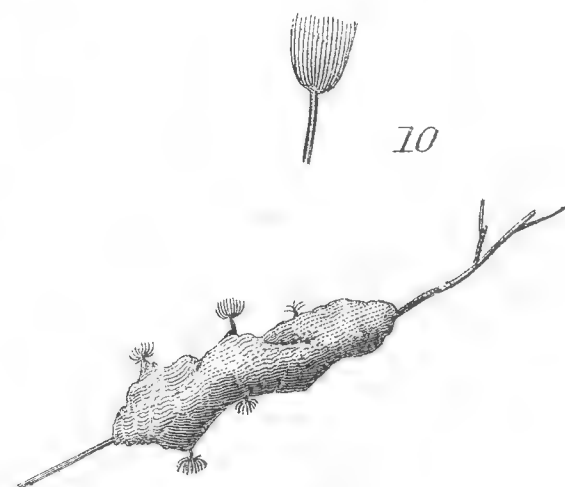
*Cellepora hyalina.*



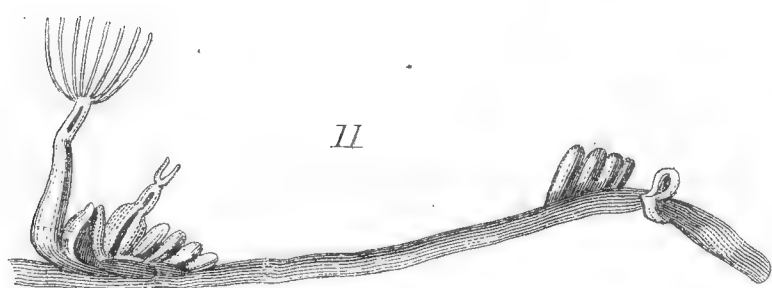
*Bicellaria fastigiata.*



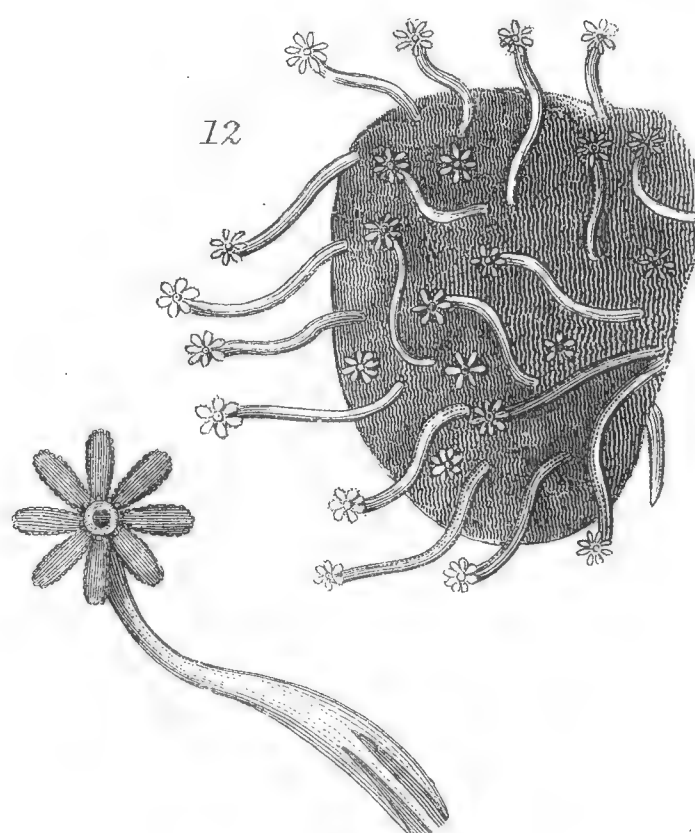
*Gorgonia patula.*



*Millipora spongitis.*

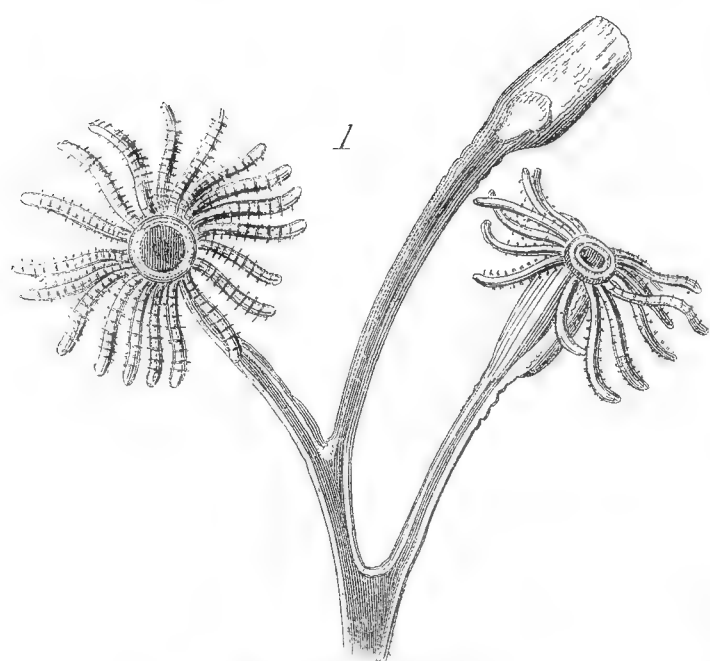


*Serialaria tengidera.*

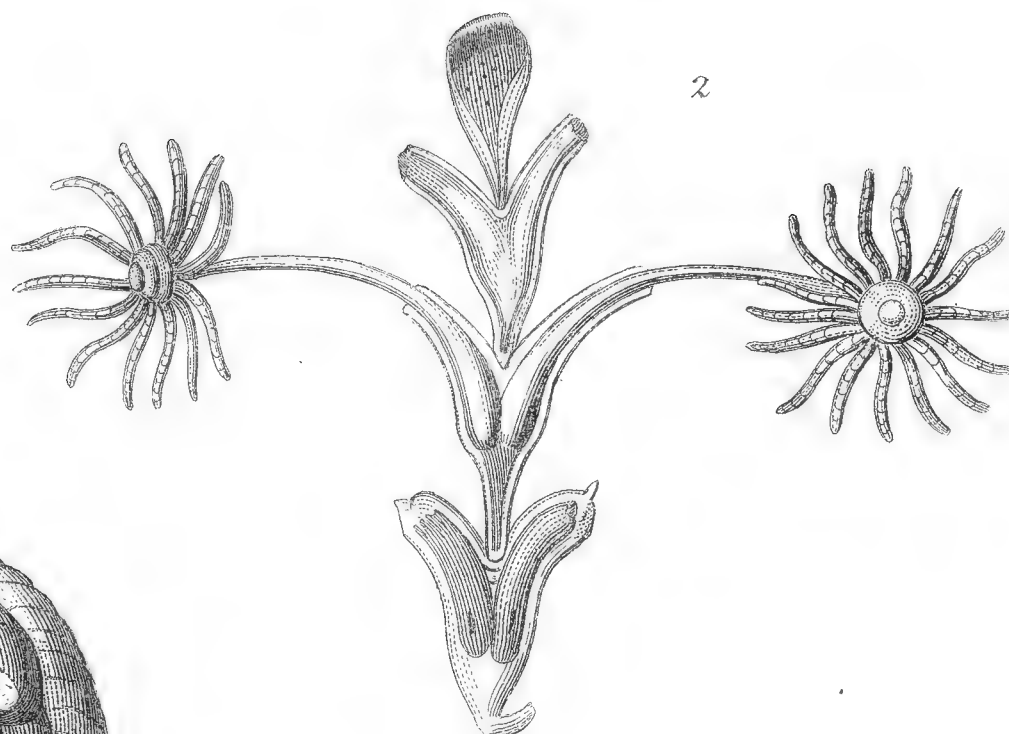


*Renilla Americana.*

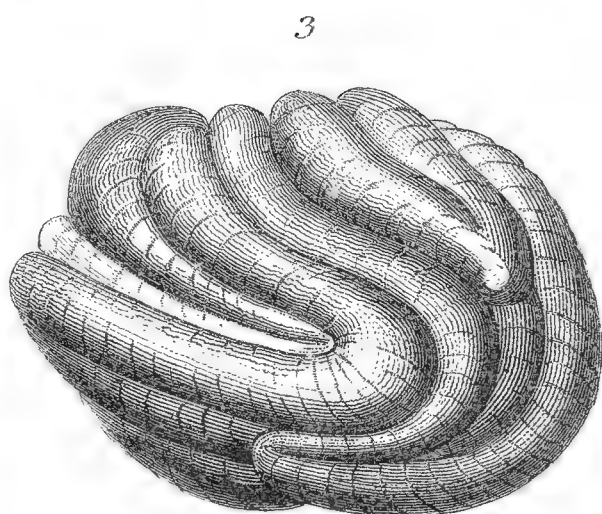




*Laomedea dichotoma.*



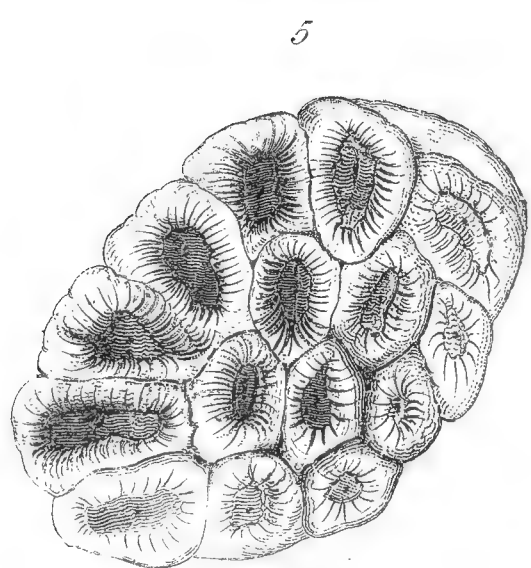
*Dynamena pumila.*



*Meandrina cerebriformis.*

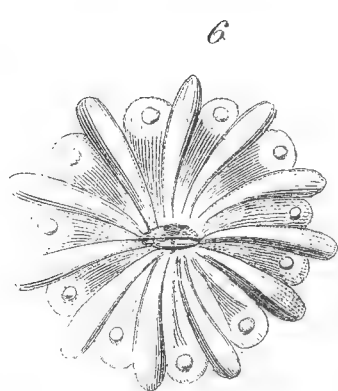


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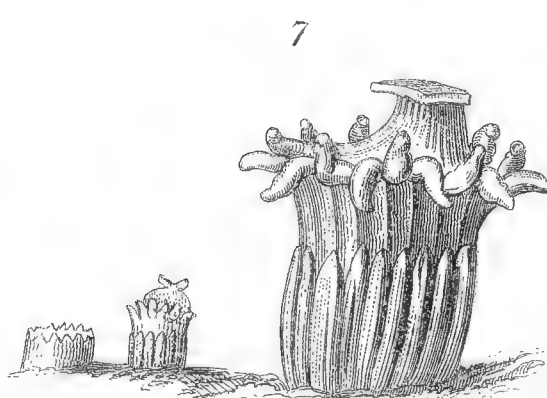


5

4-5 *Astræa Ananas.*

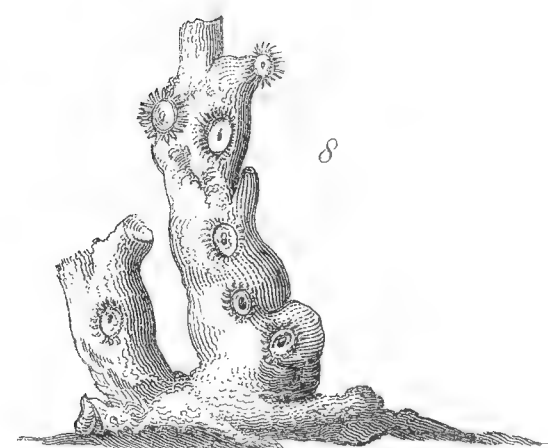


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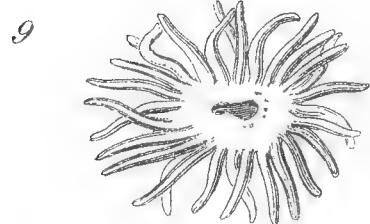
7

6-7 *Caryophyllia solitaria.*



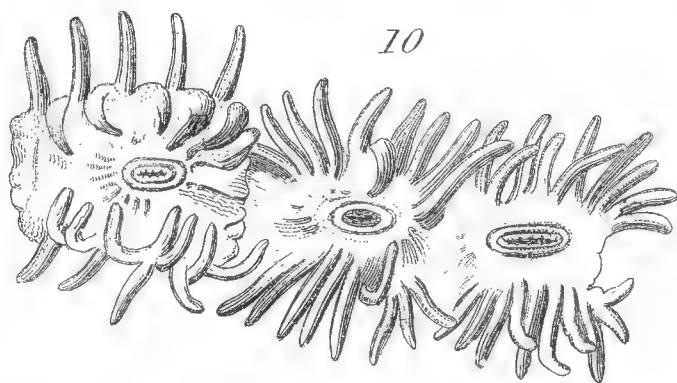
8

*Oculina varicosa.*

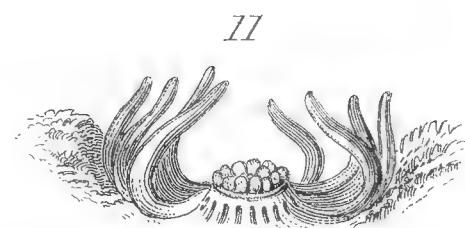


9

*Oculina varicosa.*

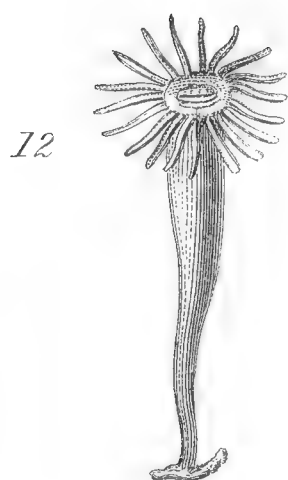


10



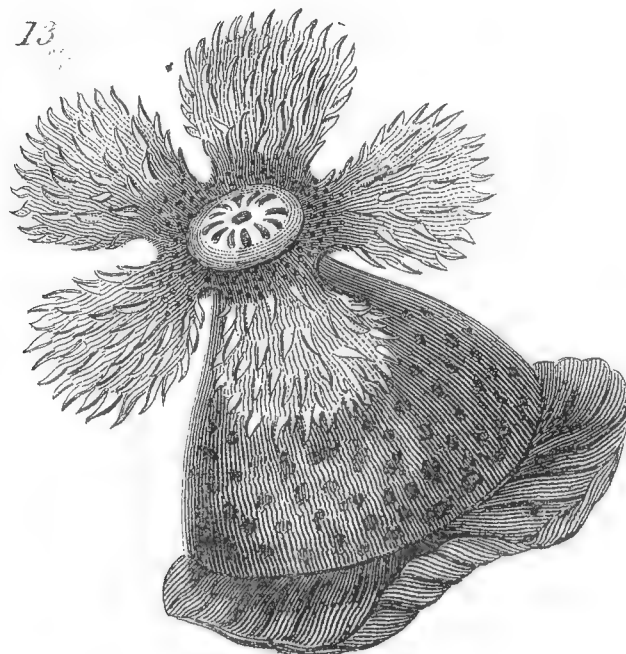
11

10-11 *Meandrina limosa.*



12

*Zoanthus Ellisii.*



13

*Actinia dianthus.*



14

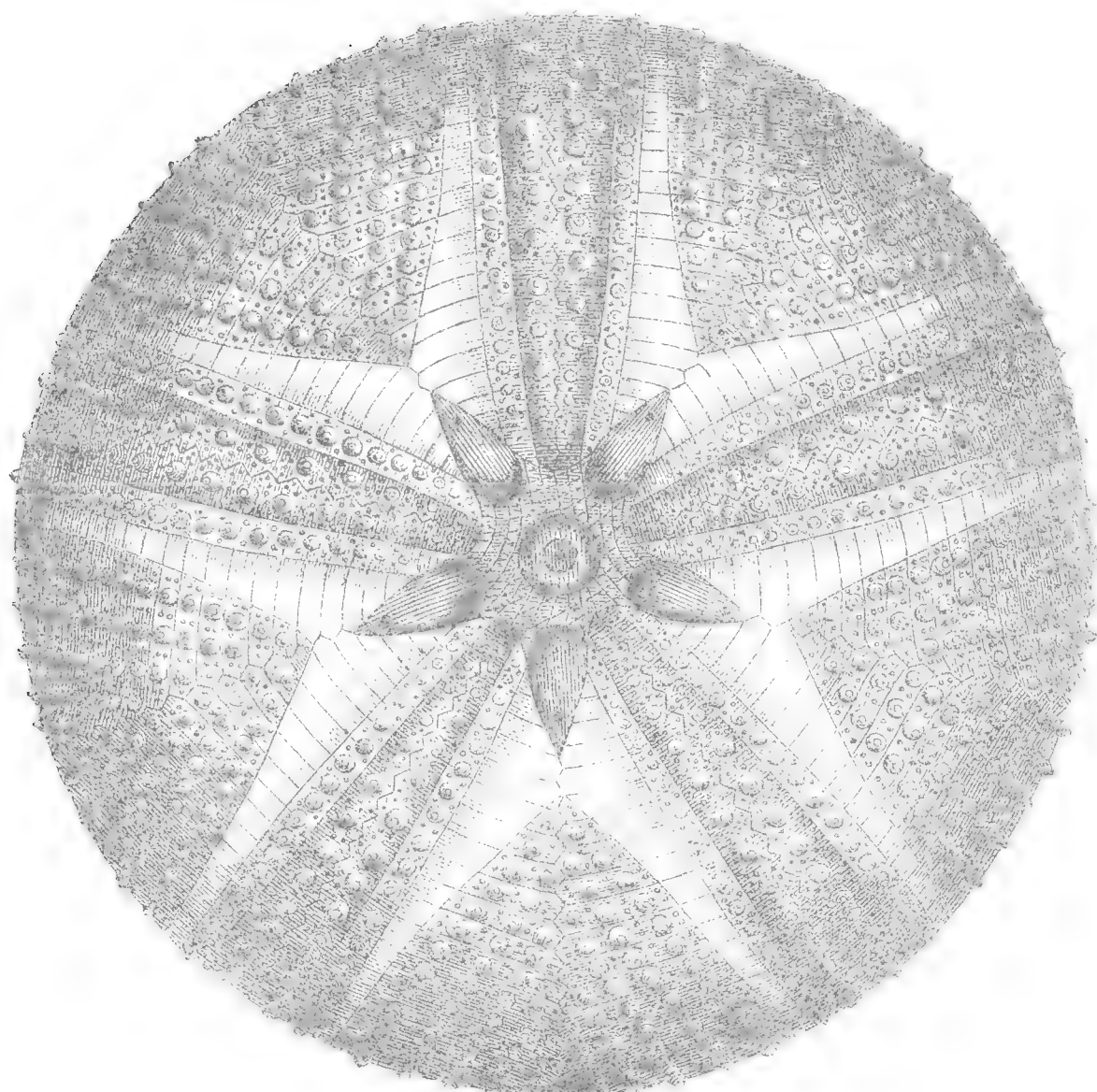
*Plumularia secundaria.*





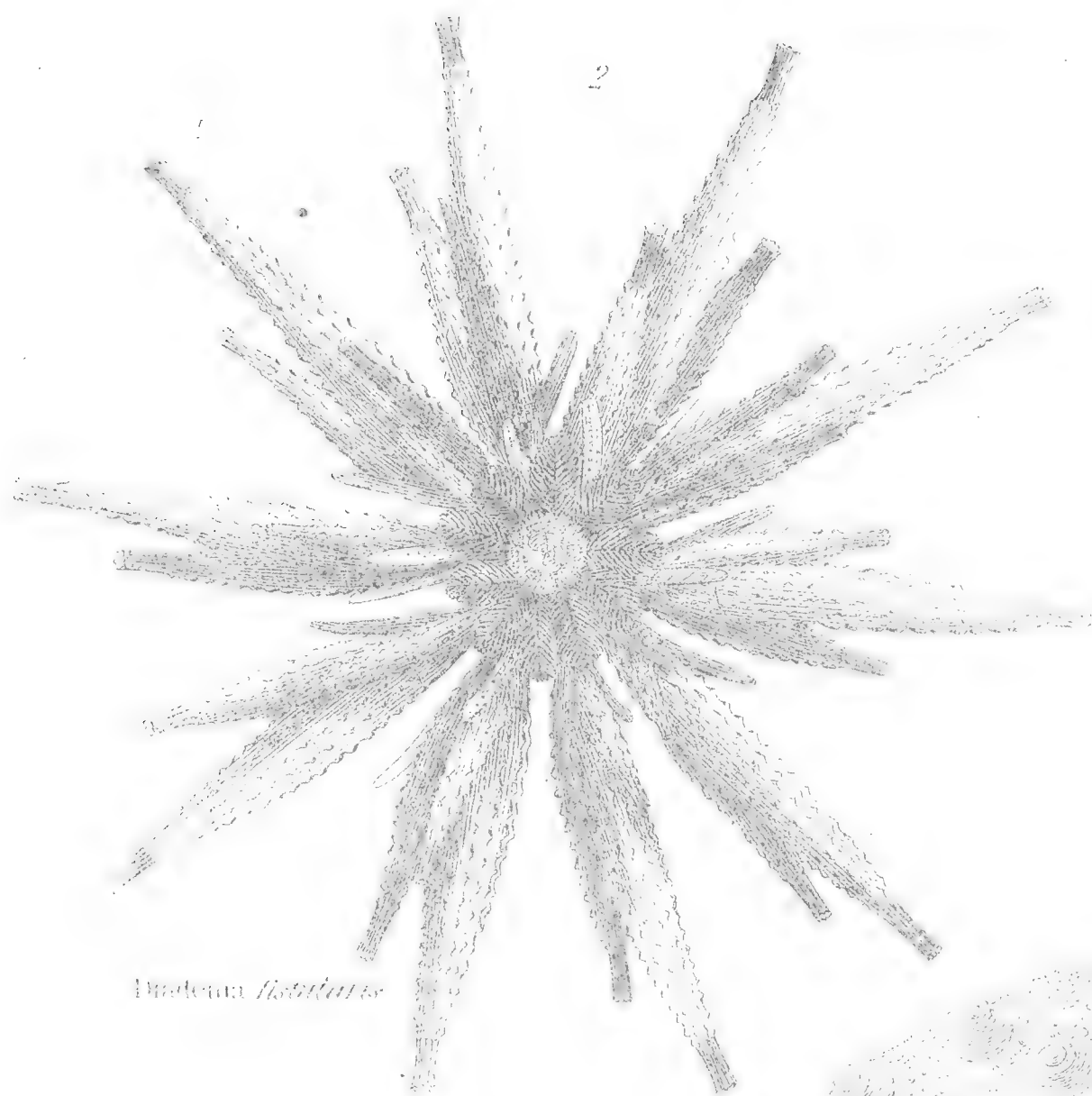
Family I. CIDARIDÆ.

1



*Astropyga radiata.*

2



*Diadema histidatus.*

3



*Apical system.*

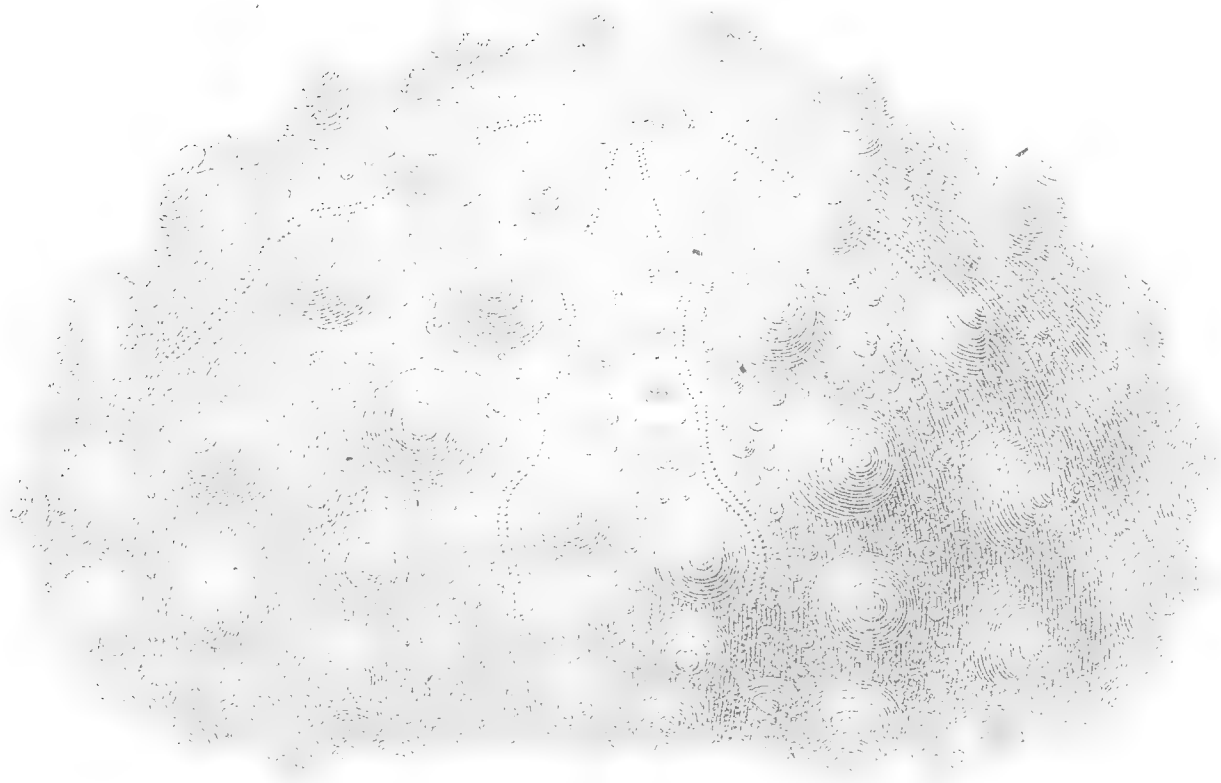


*Cidaris unguiculata.*





Family II. ECHINIDÆ.



*Echinometra Mammillatus*



*Echinus pulcherrimus*



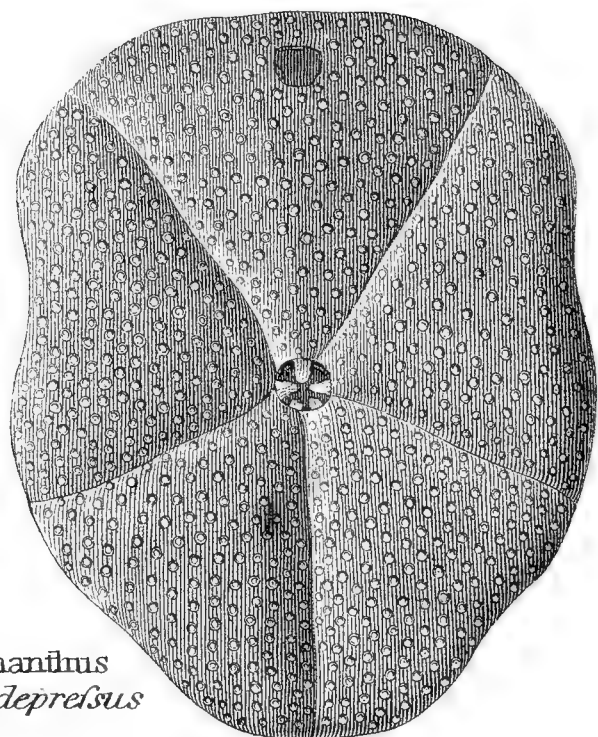
*Echinus elegans*





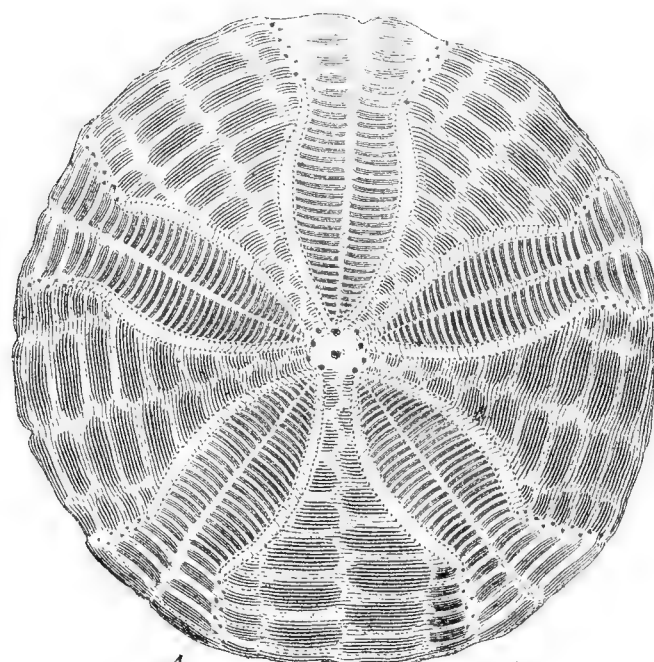
Family Scutellidæ.

1



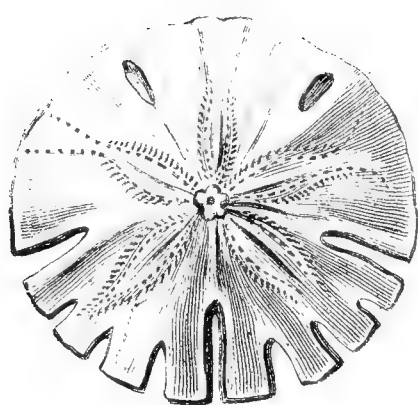
*Echinanthus  
subdepressus*

2



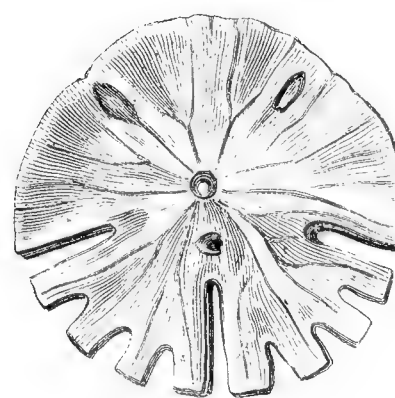
*Arachnoides Placenta*

3

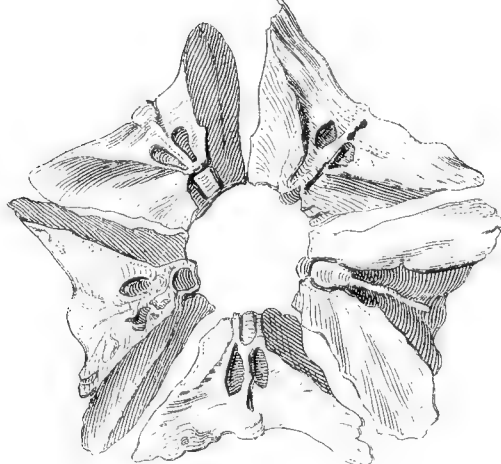


*Rotula Angusti*

4

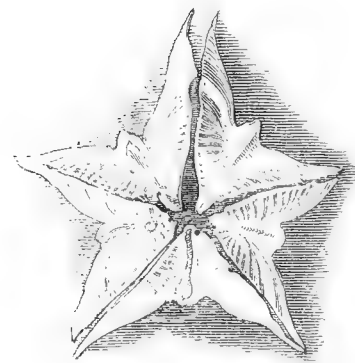


5



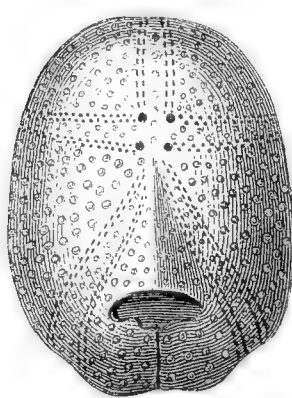
*Jaws of Echinanthus Rosaceus*

6

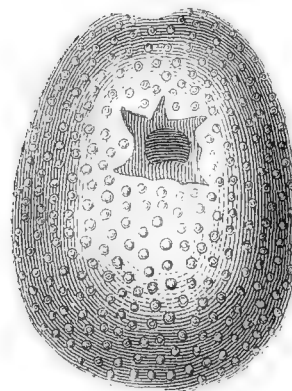


*Jaws of Mellita hexapora*

7



8

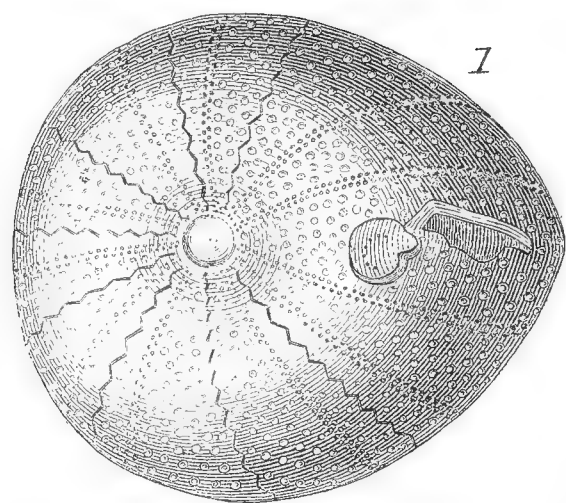


*Calsidulus Caribæarum*



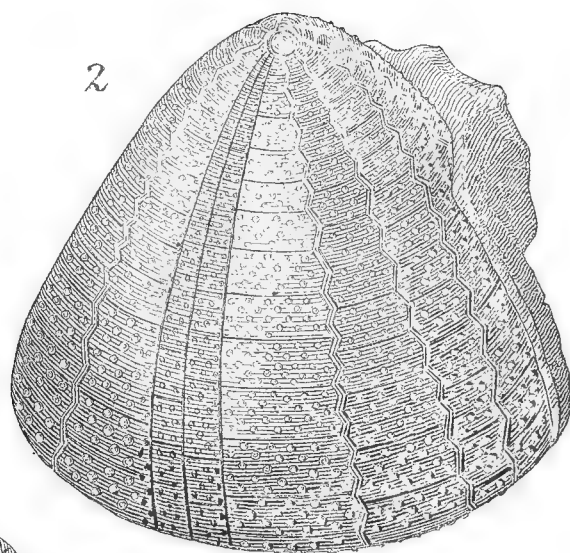


Family Galeritidæ.

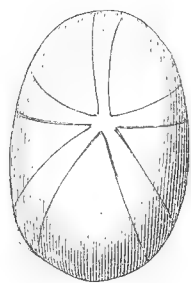


1

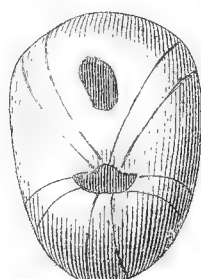
*Galerites albo, galerus.*



2

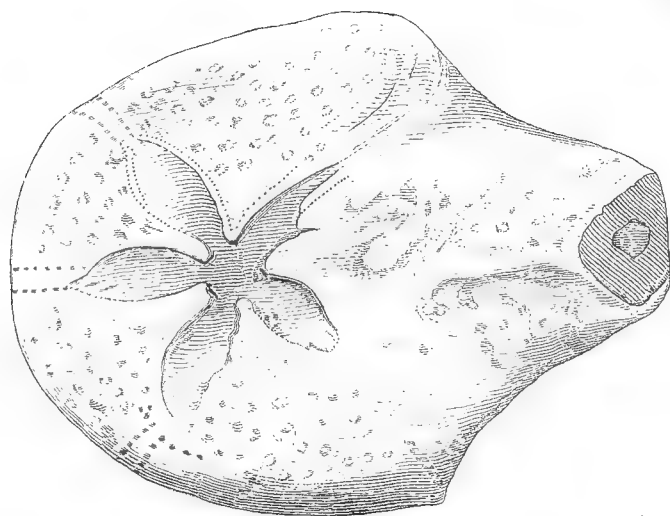


3



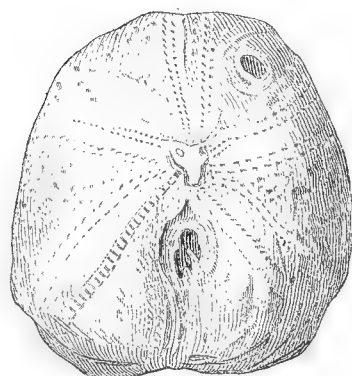
4

*Echinoneus minor.*



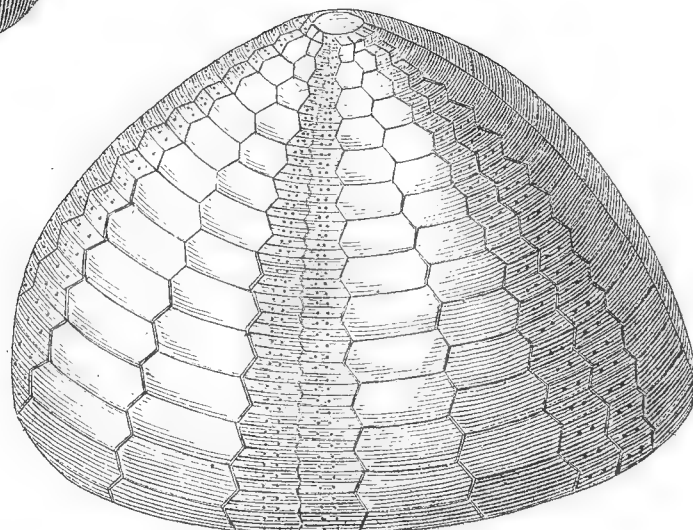
5

*Echinolampas koenigii*



6

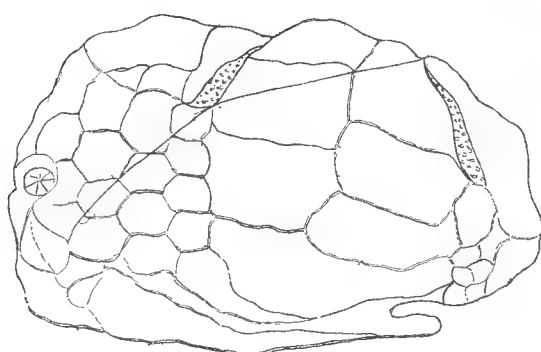
*Echinobrissus Bregmii*



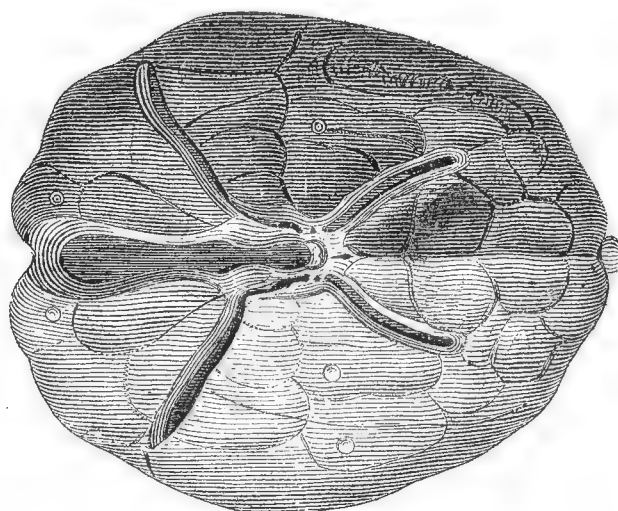
7

*Echinocorys Oratus*

Fam. Spatangidæ.

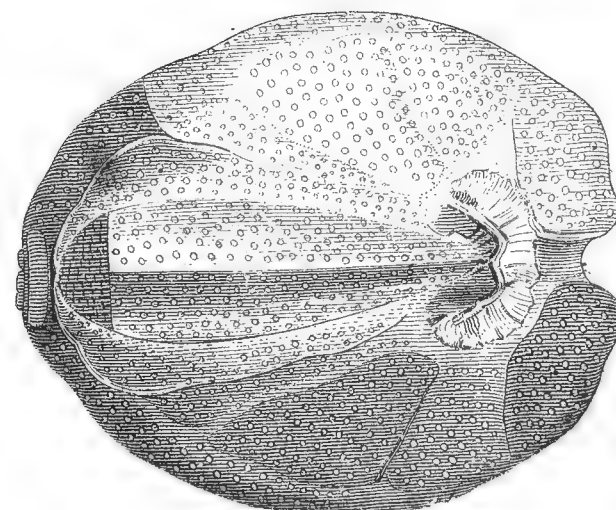


8

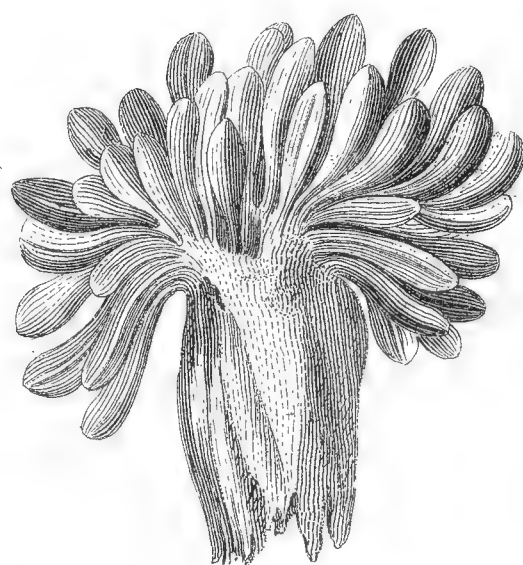


9

*Schizaster atropos.*

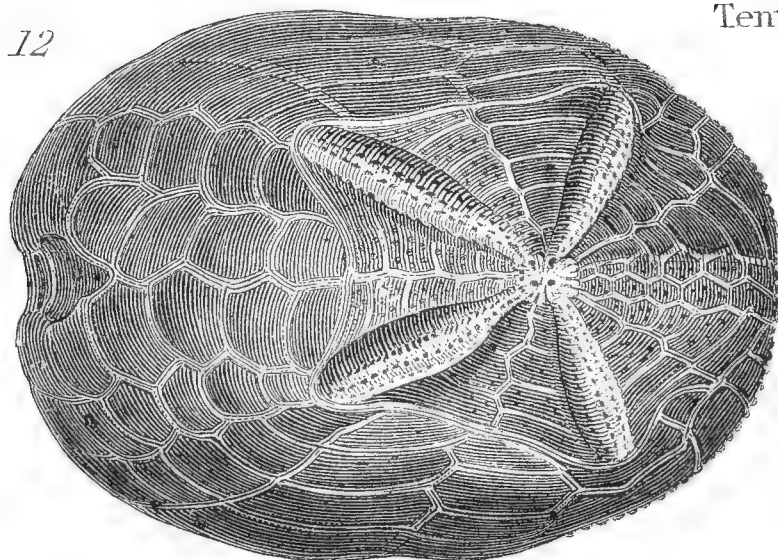


10



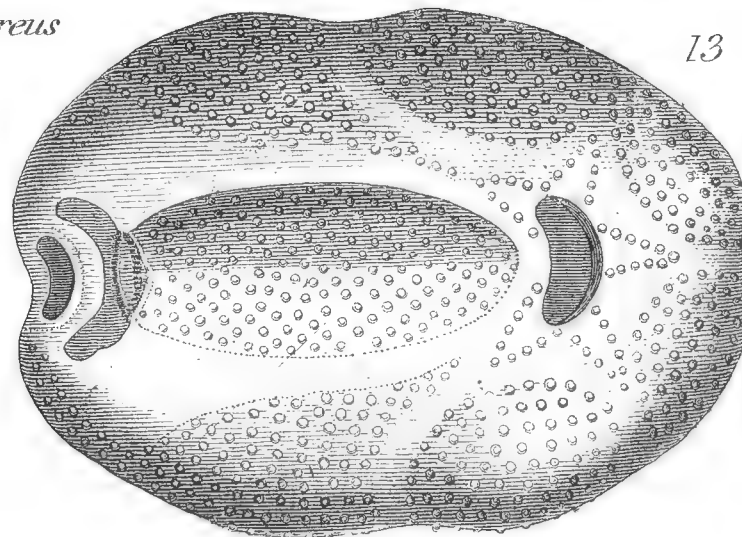
11

Tentacula of *Spatangus Purpureus*



12

*Brissus ventricosus.*

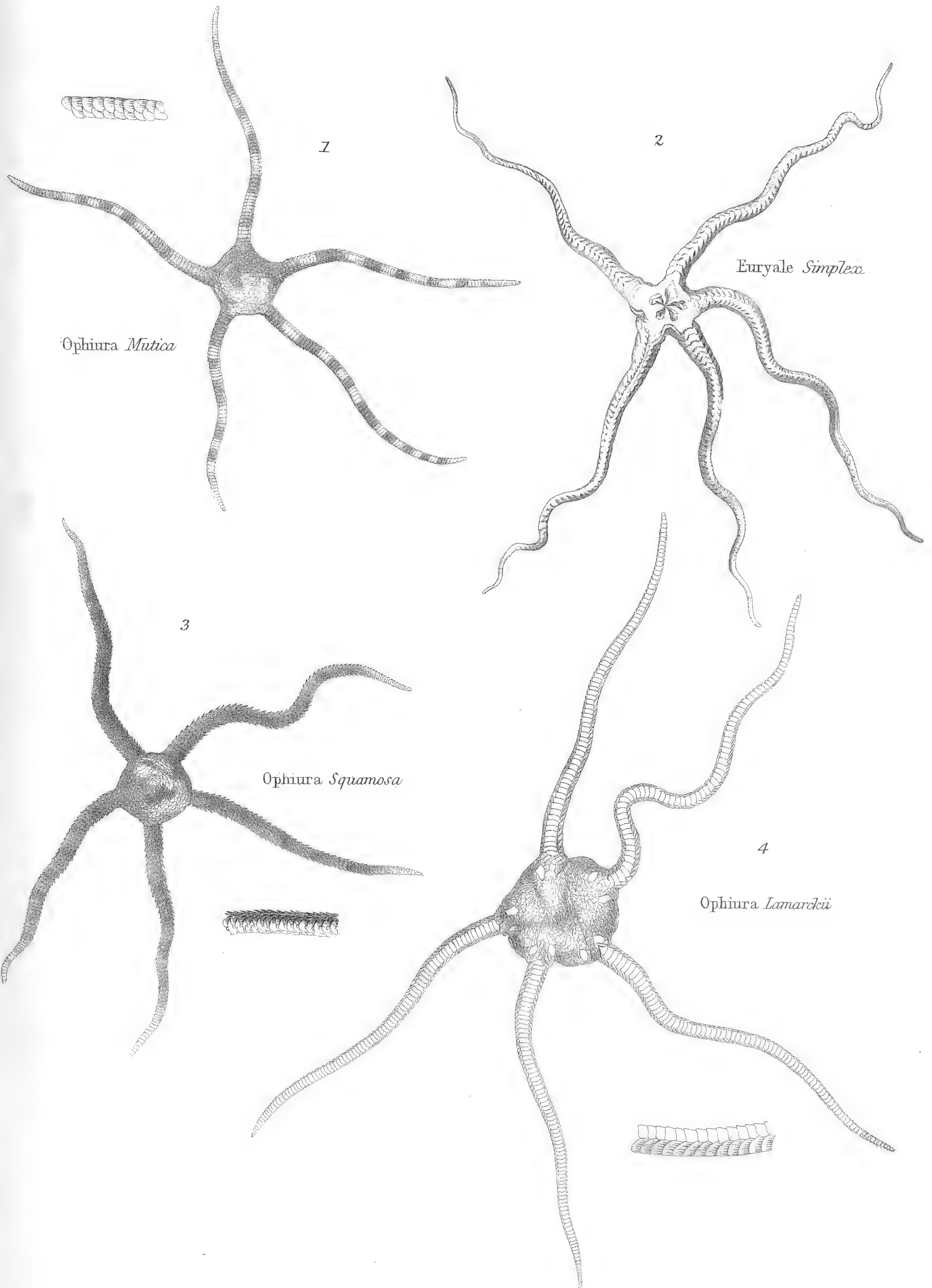


13



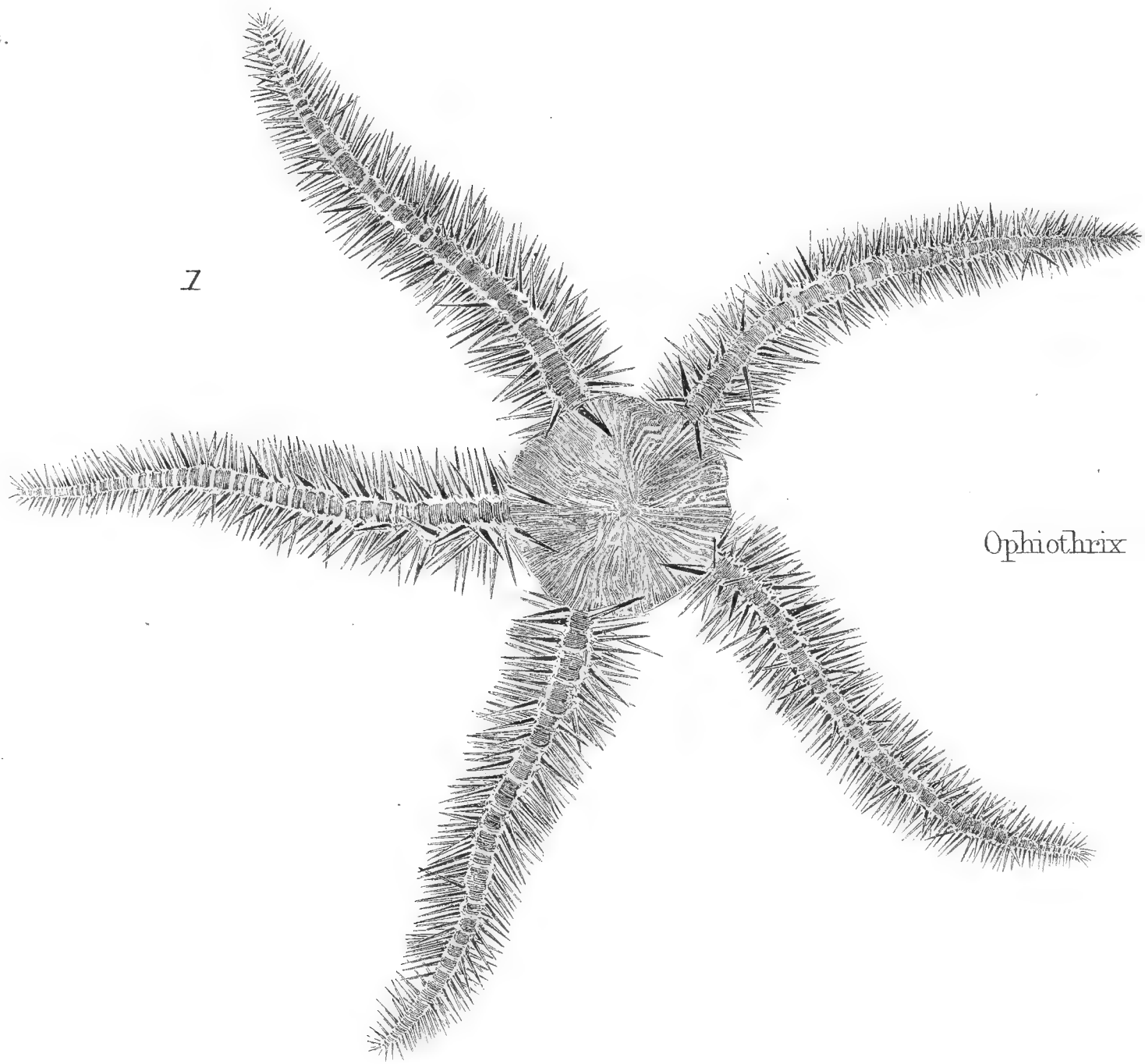


Family Ophiuridae

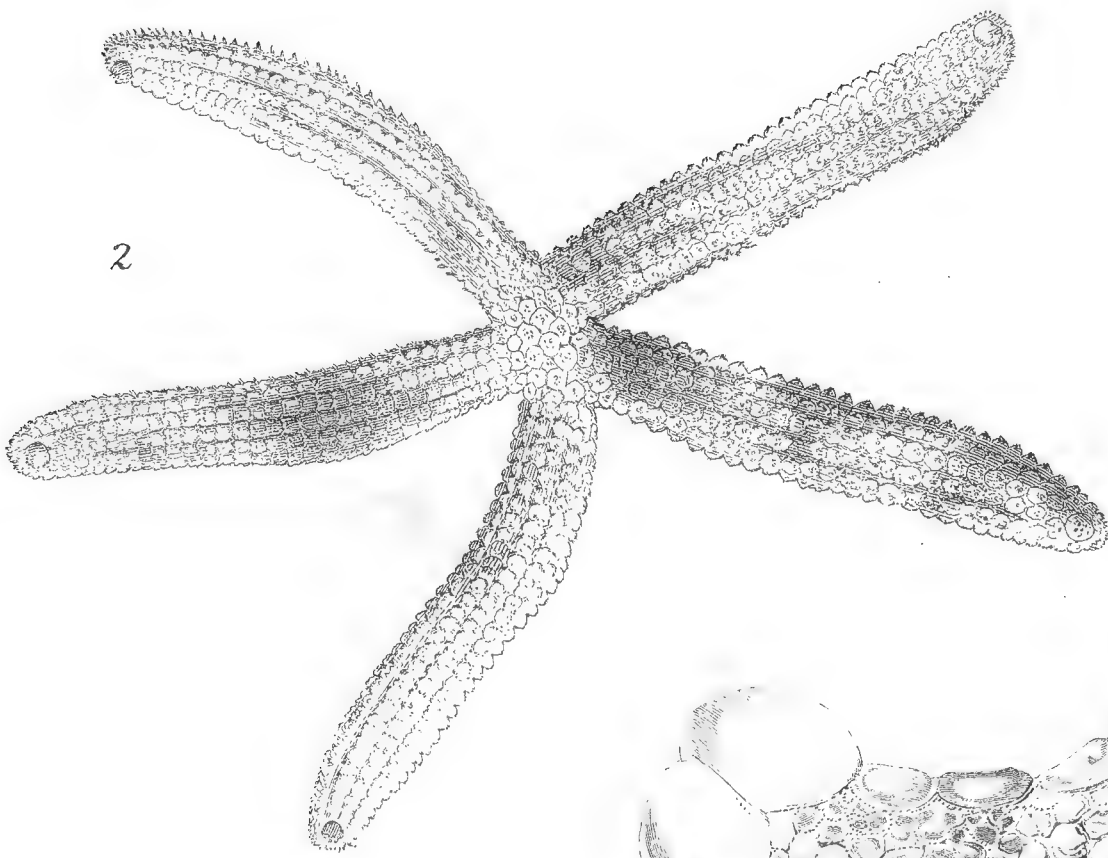




Family Ophiuridæ.

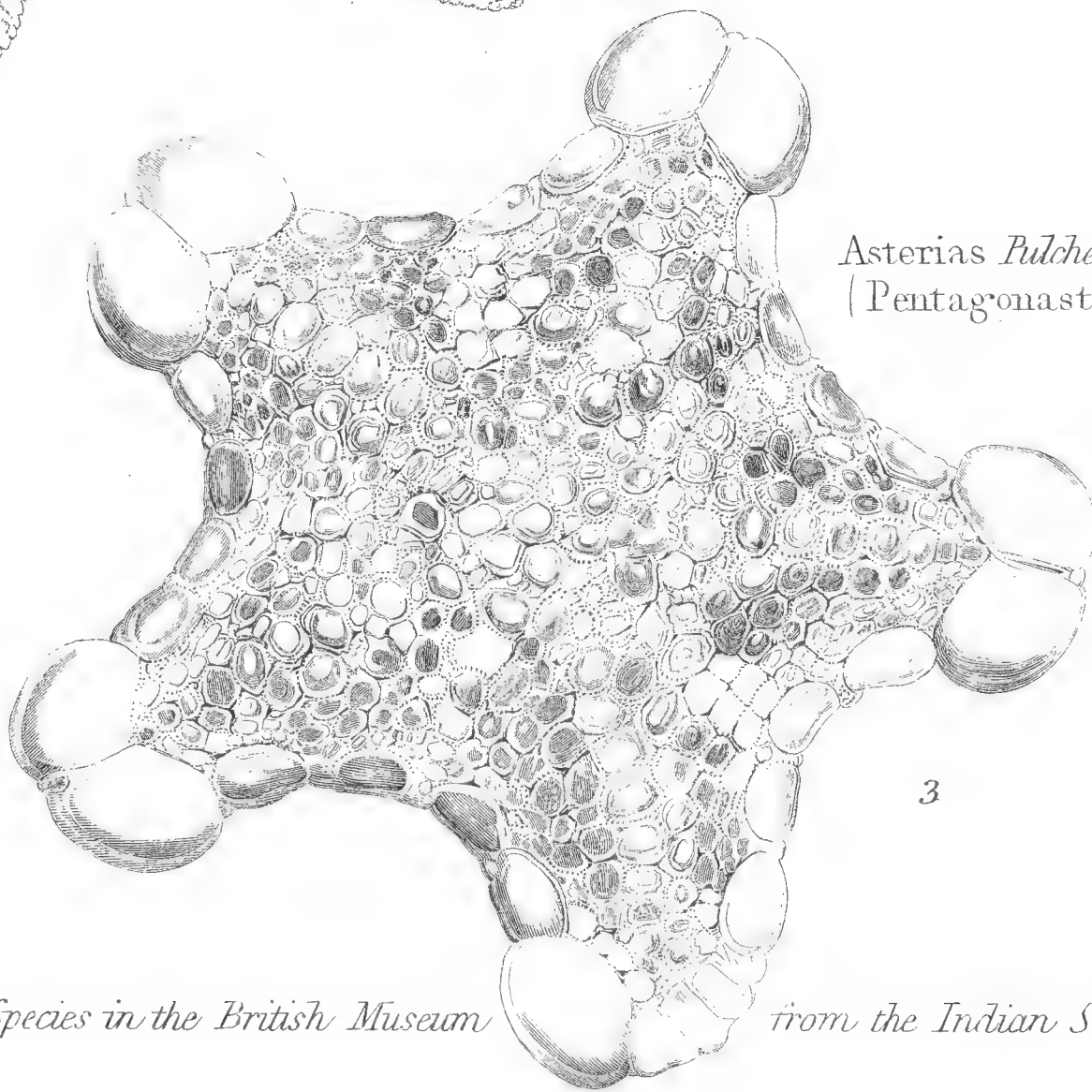


*Ophiothrix lineolata*



*Asterias cylindrica*

Family Asteroiadae.



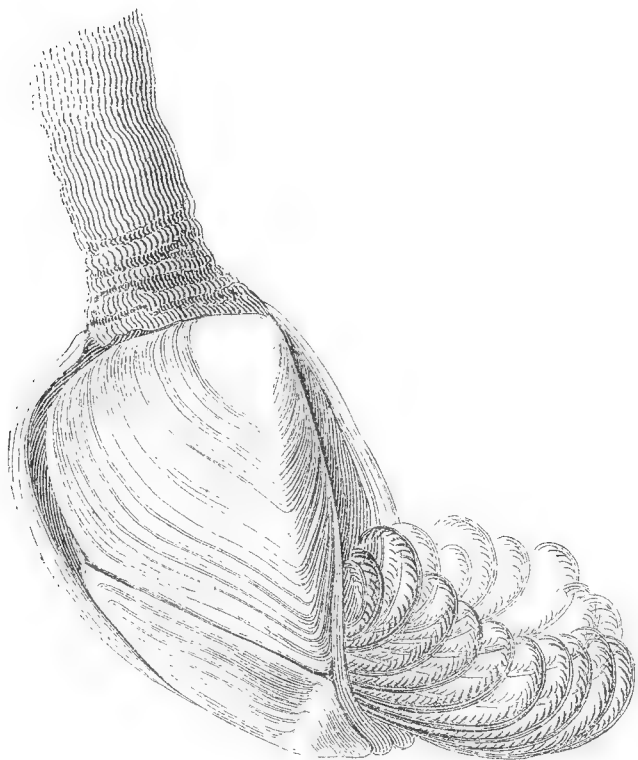
*Asterias Pulchellus*  
(*Pentagonaster*)

*All new Species in the British Museum from the Indian Seas.*





1



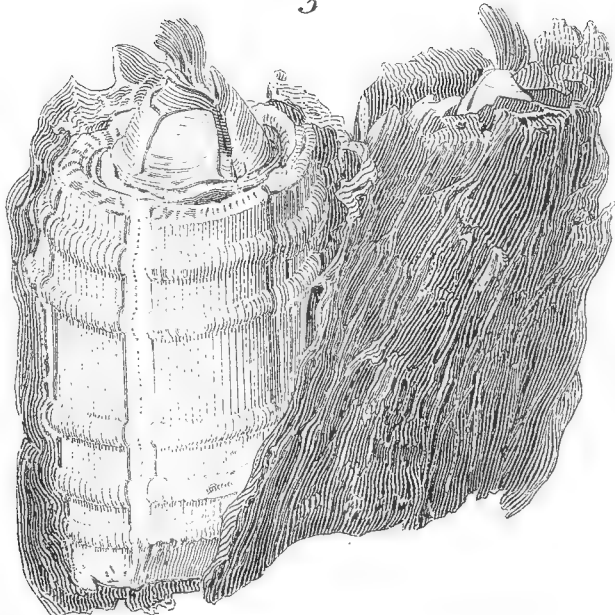
*Lepas anatifera*

2



*Scalpellum vulgare*

3



*Tubicinella trachealis*

6



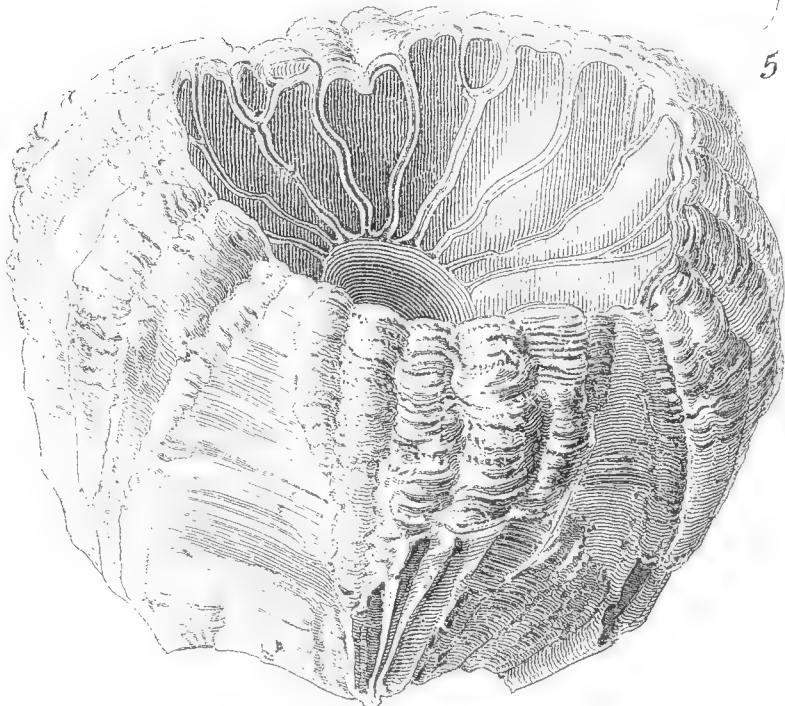
*Conchoderma virgata*



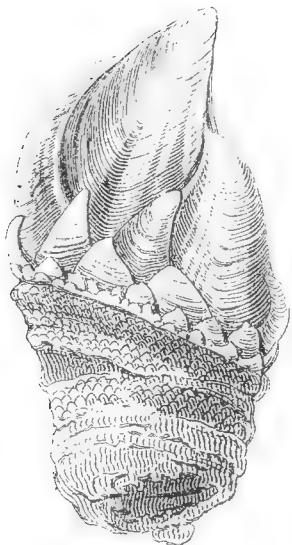
*Coronula diadema*

4

5

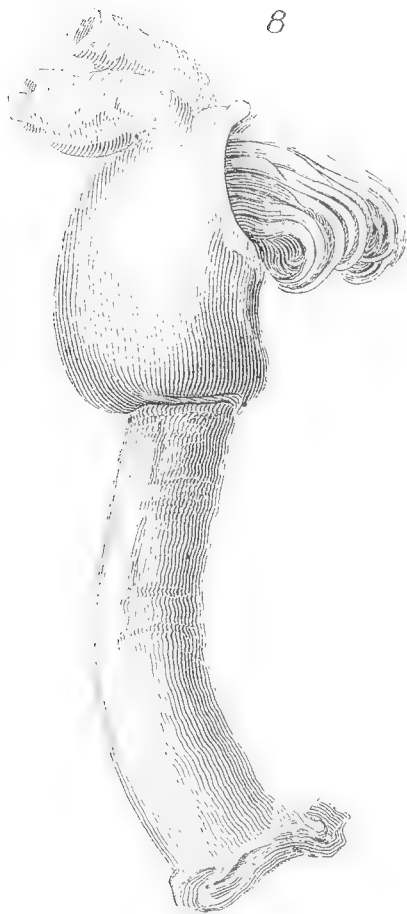


7



*Pollicipes Corruccopia*

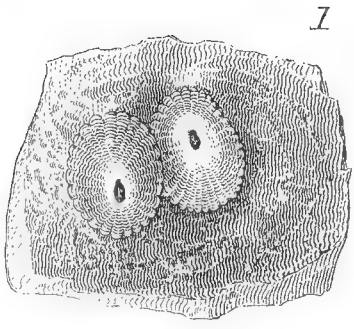
8



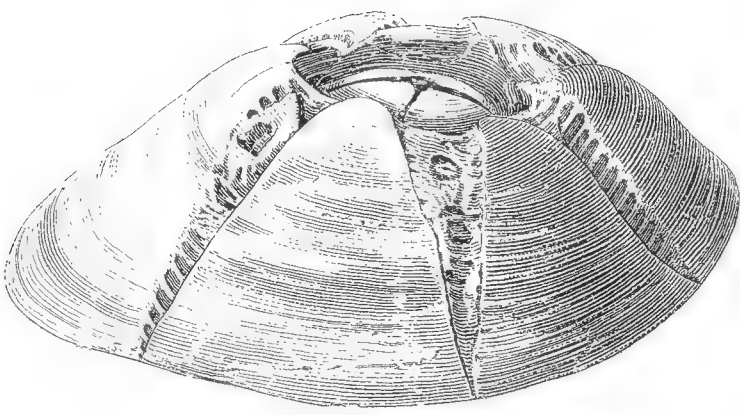
*Conchoderma Aurita*



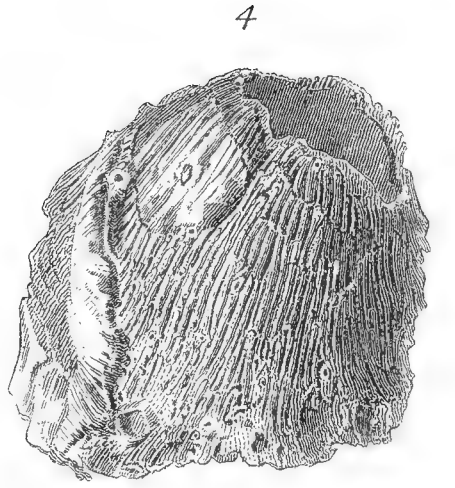
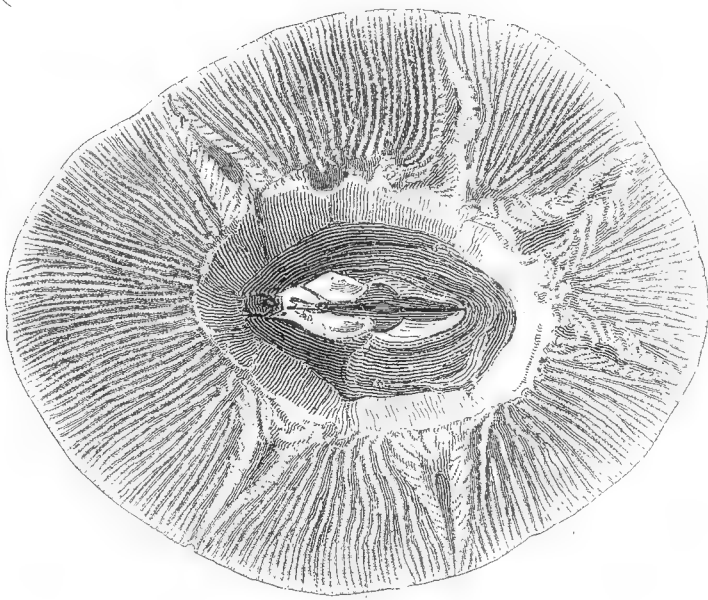




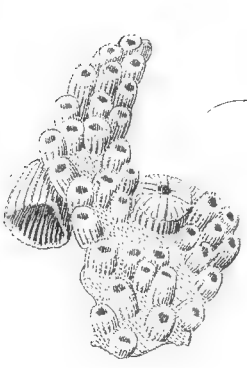
*Pyrgoma cancellatum*



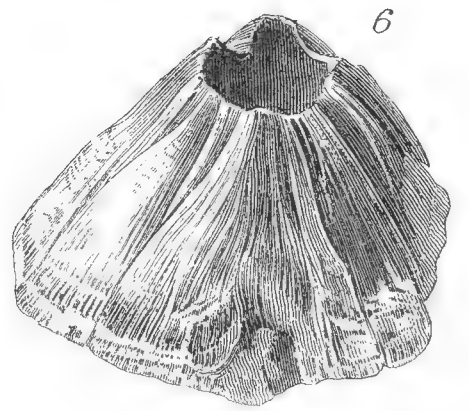
*Chelonobia testudinaria*



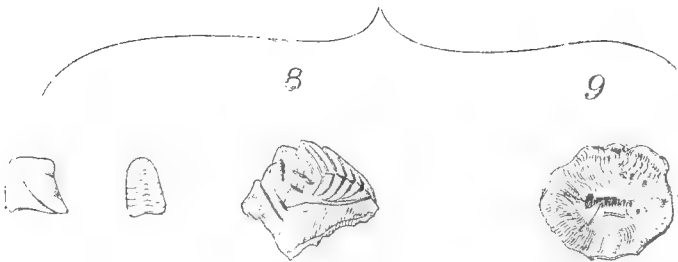
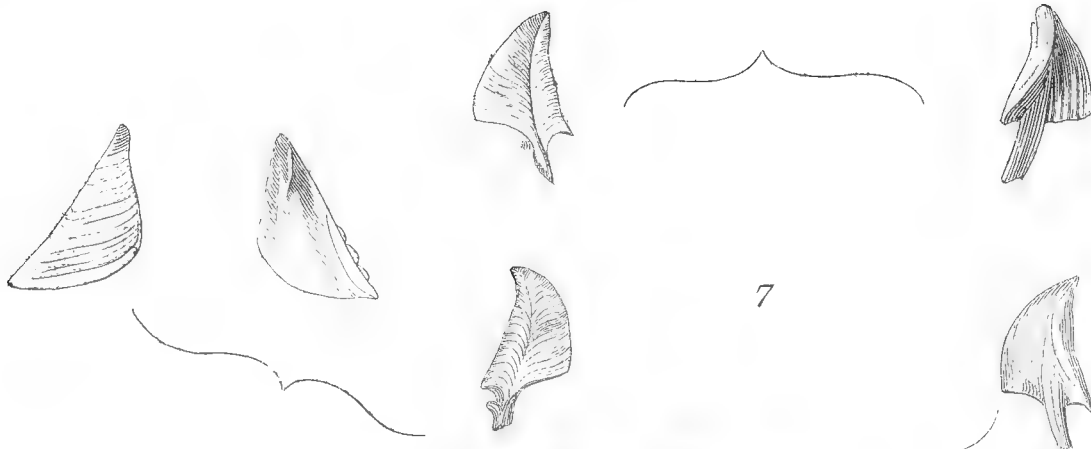
*Conia porosa*



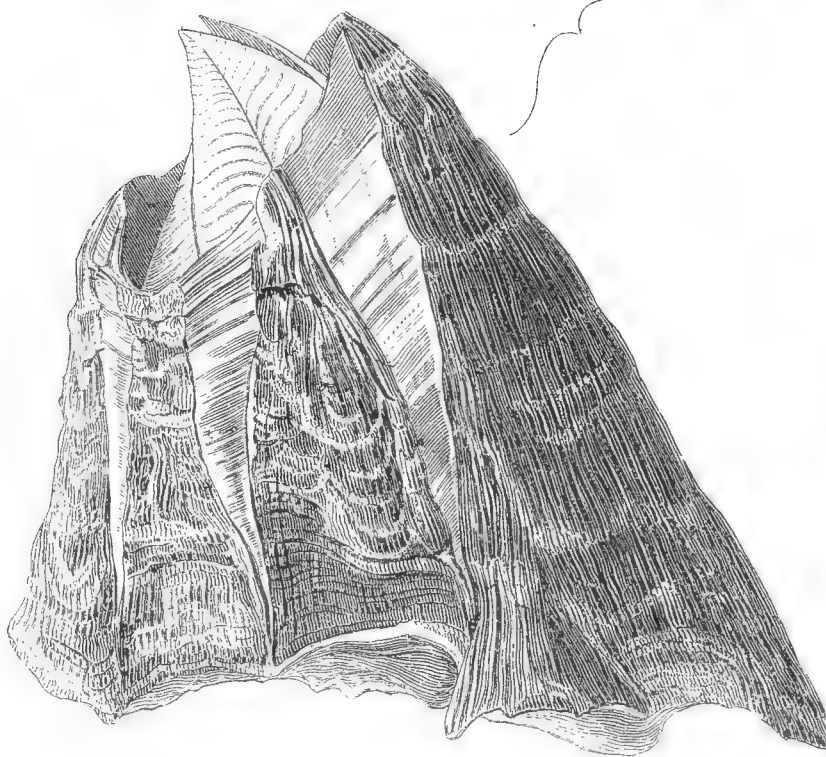
*Creusia spinulosa*



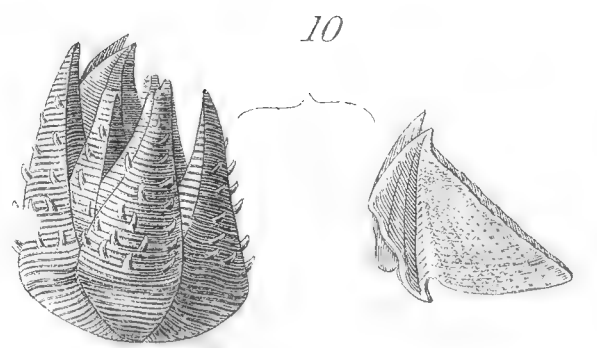
*Balanus tintinnabulum*



*Verruca stromia*

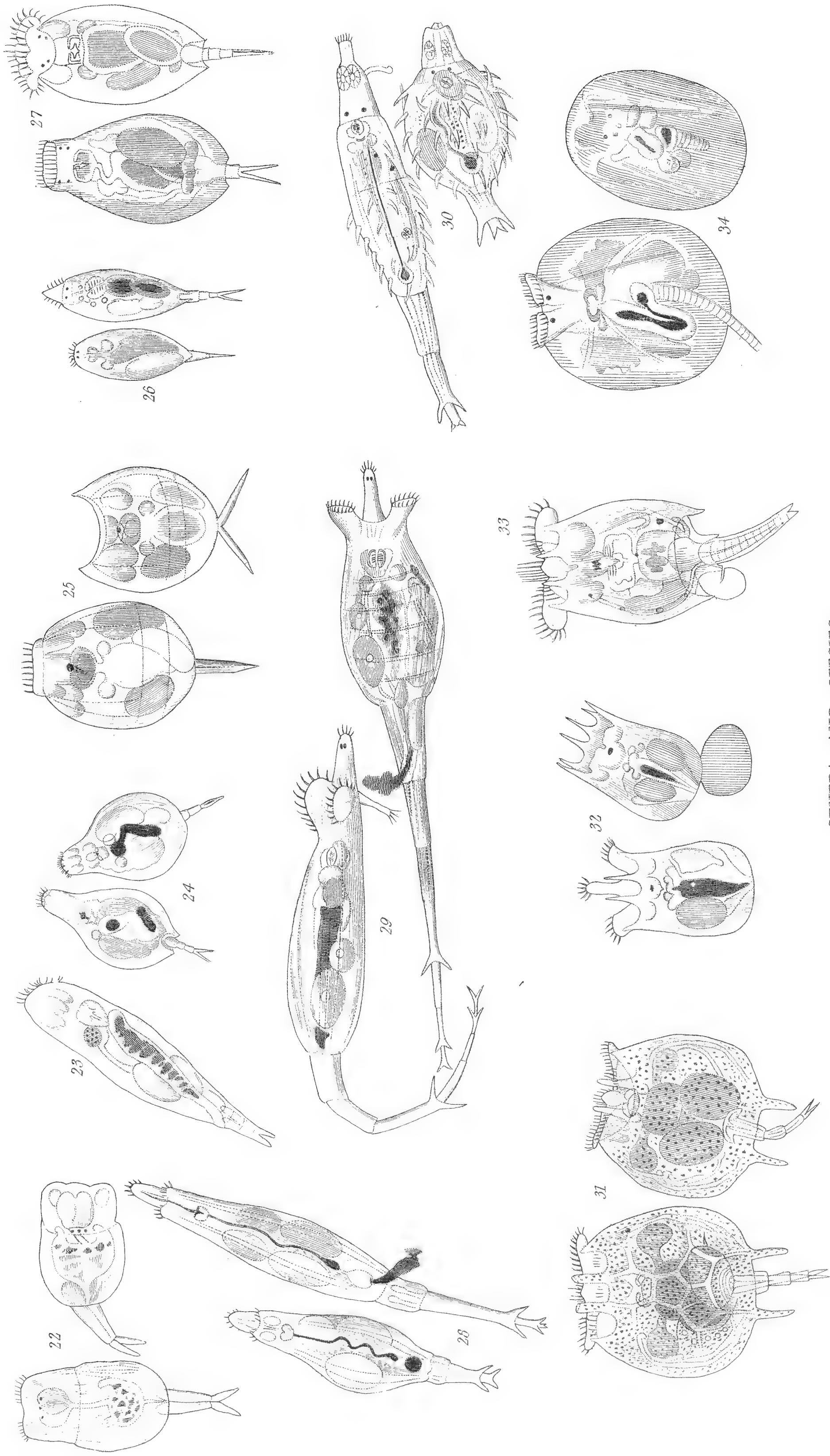


*Balanus tintinnabulum*



*Acasta spongites*



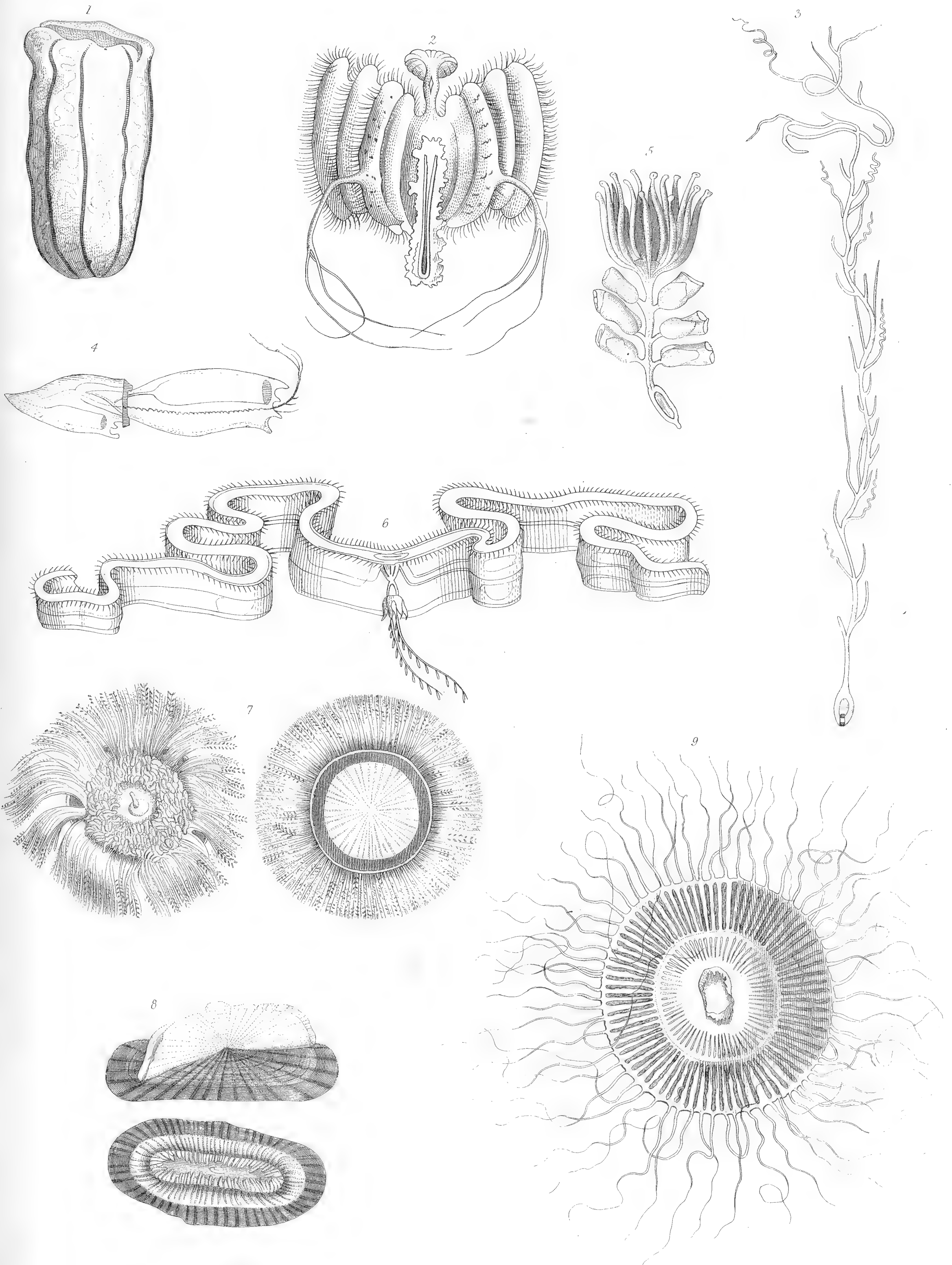


GENERA AND SPECIES.

- |                                      |                                 |                                    |
|--------------------------------------|---------------------------------|------------------------------------|
| 22. <i>Triphrthalmus, Dorsualis.</i> | 28. <i>Callidina, Elegans.</i>  | 31. <i>Noteus, Quadricornis.</i>   |
| 23. <i>Cycloglena, Lupus.</i>        | 29. <i>Rotifer, Macurus.</i>    | 32. <i>Anuraea, Squamula.</i>      |
| 24. <i>Iepadella, Ovalis..</i>       | 30. <i>Philodina, Aculeata.</i> | 33. <i>Brachionus, Amphiceros.</i> |
|                                      | 31. <i>Pterodina, Patina.</i>   |                                    |







1. *Beroë macrostoma*.

2. *Janira hexagona*.

3. *Rhizophysa planostoma*.

4. *Diphyes Boryi*.

5. *Physophora disticha*.

6. *Cestum Veneris*.

7. *Porpita gigantea*.

8. *Velella cyanea*.

9. *Aequorea Forskaelina*.



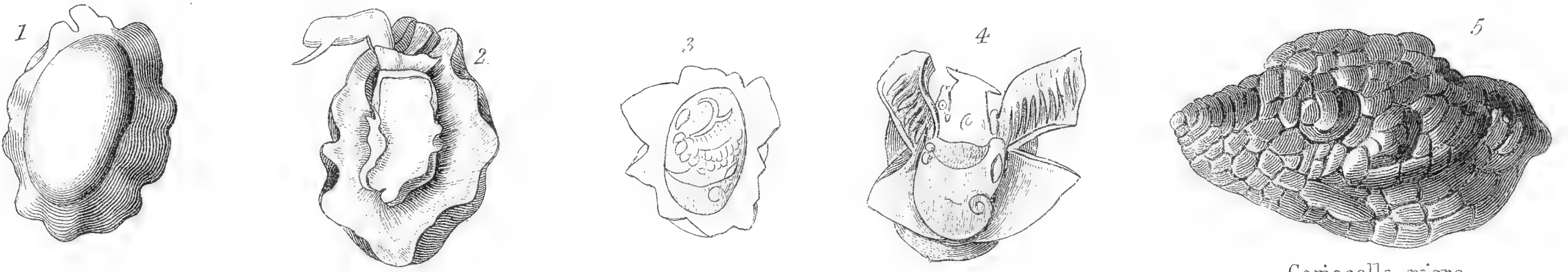
# MOLLUSCA.

Class. Gasteropoda.

Sub-class. Ctenobranchiata

Order. Pectinibranchiata.

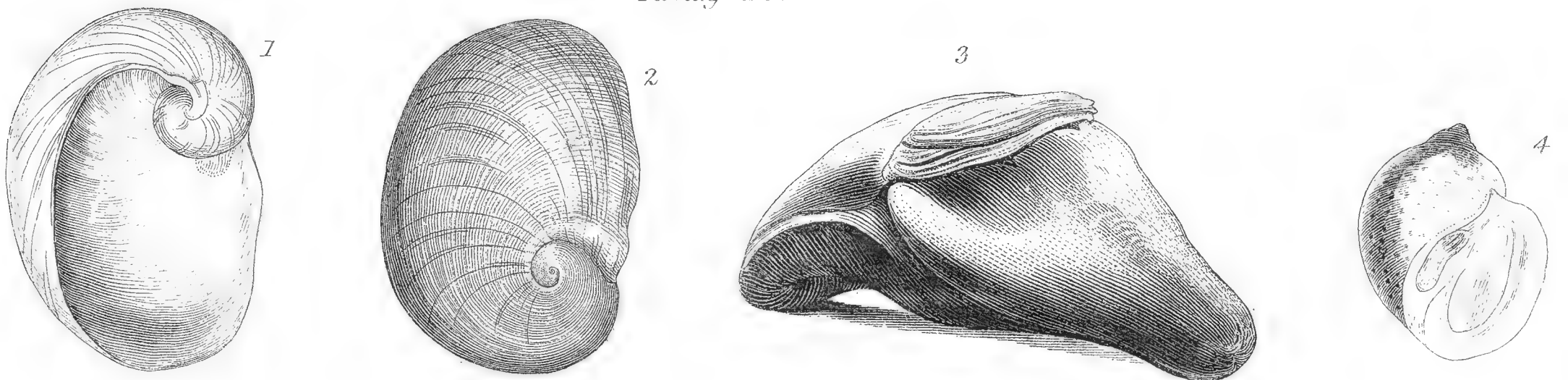
## Family Lamellariidæ.



1-4 *Ernea perspicua*.

*Coriocella nigra*.

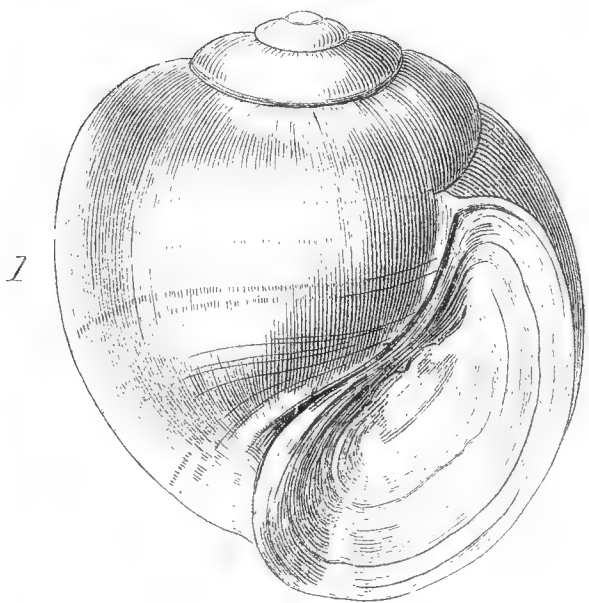
## Family Naticidæ.



1-3 *Stomatia habitoideum*.

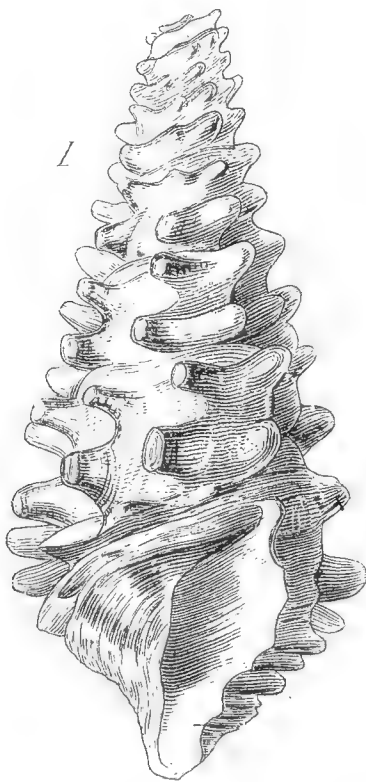
*Natica millepunctata*  
and its operculum.

## Family Ampullariidæ.



*Pachystoma solidum*, and its Operculum.

## Family Melaniidæ.

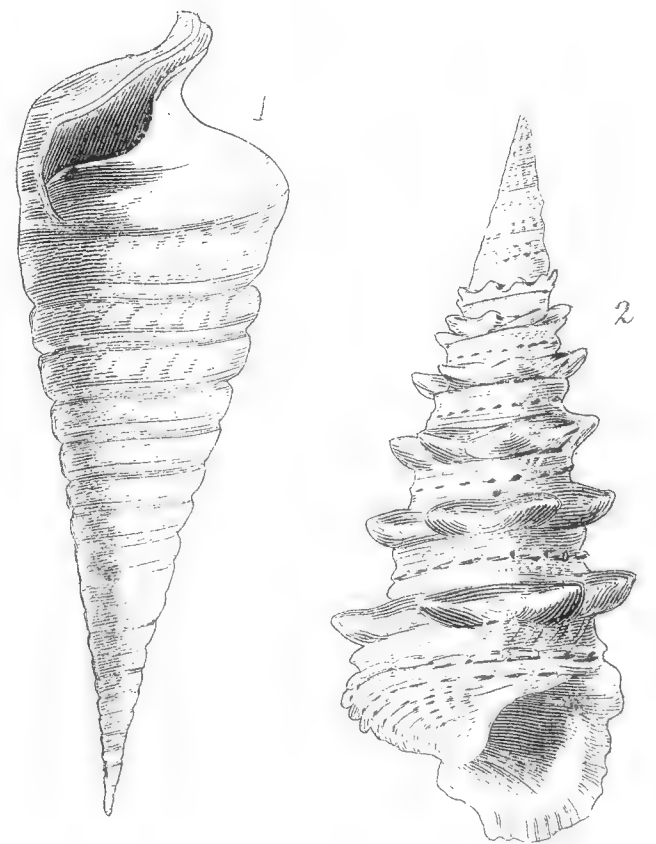


*Bibex melania byronensis*.



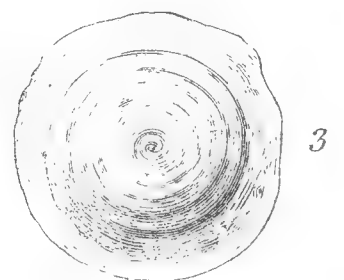
Oper. of No 1

## Family Cerithiidæ.



*Cerithium leæve*.

*Tympanotomus muricatus*.



Oper of *Fuscum*, *Cerithium telescopium*

## Family Littorimidæ.



*Littorina litorea*.



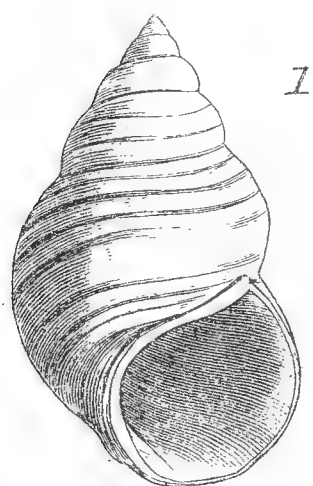


Class. Gasteropoda.

Sub-class. Ctenobranchiata.

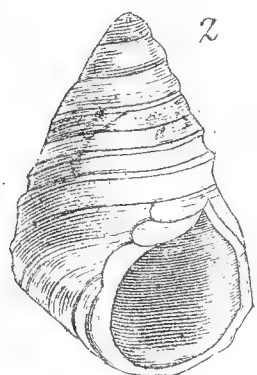
Order. Pectinibranchiata.

Family Viviparidæ



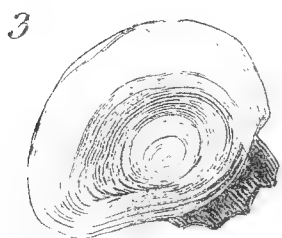
1

Viviparus. Paludina bengalensis.



2

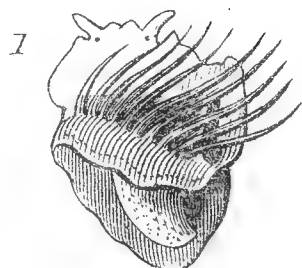
Viviparus Paludina costata.



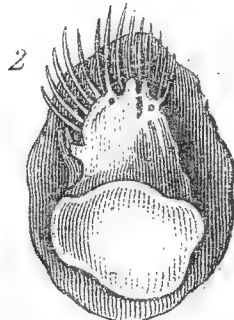
3

Viviparus. Operculum of Paludina vulgaris.

Family. Calyptræidæ.

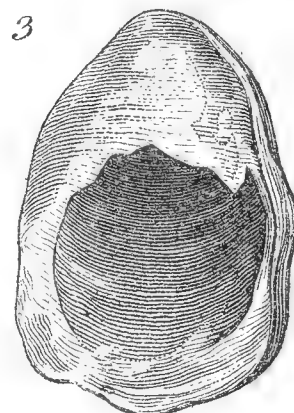


1



2

1 2 Crepidula porcellana.



3



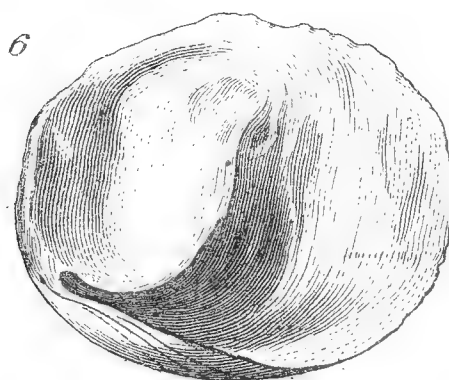
4

3 4 Crepidula Unguiformis.



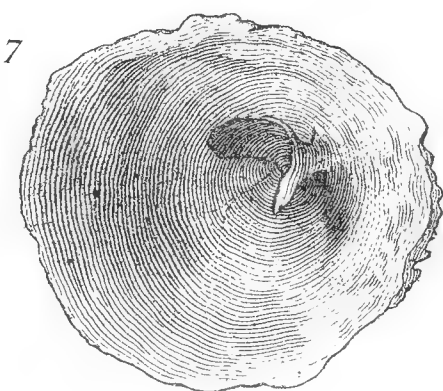
5

Crucibulum auriculatum

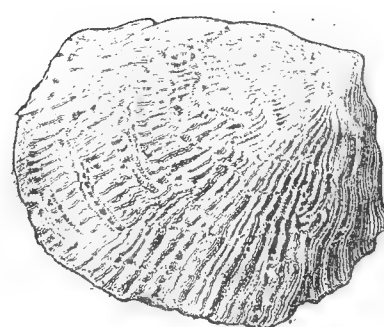


6

Crepidula dilatata.



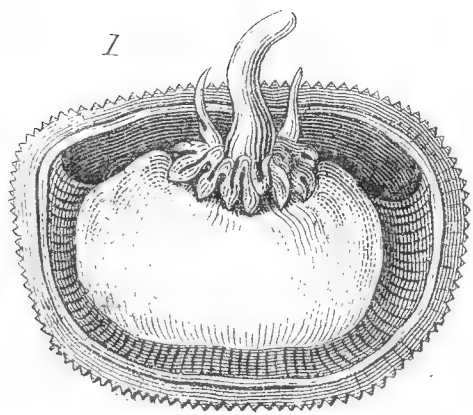
7



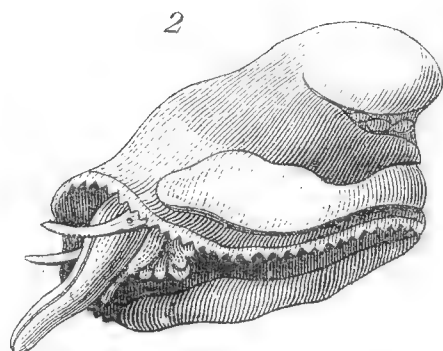
8

7 8 Calyptra esquestris

Family. Capulidæ.



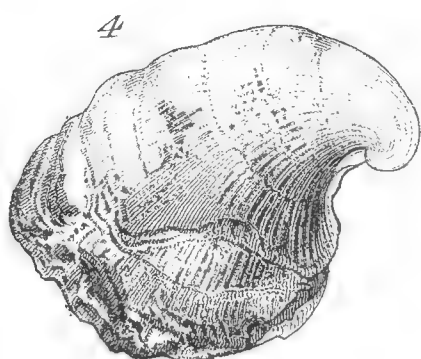
1



2



3



4

1 4 Capulus ungaricus.

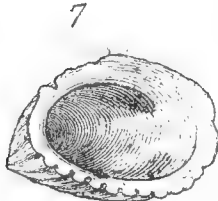


5



6

5 6 Hipponyx mitrula.

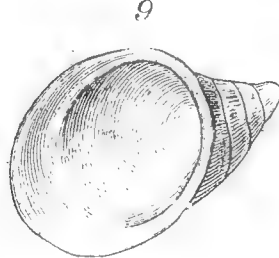


7

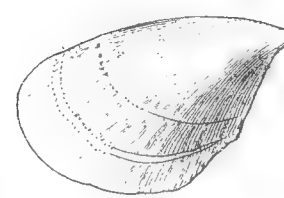


8

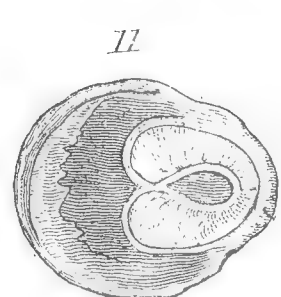
7 8 Amalthea australis.



9



10



11

9 11 Hipponyx cornucopiae.

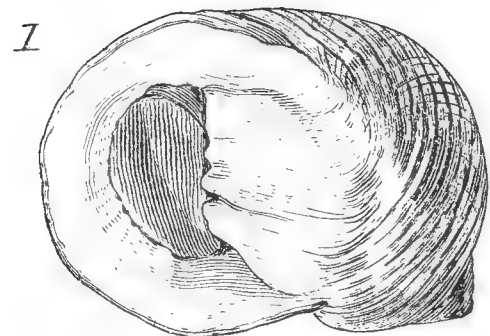


Class. Gasteropoda.

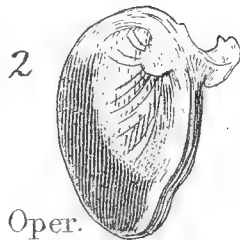
Sub-class. Ctenobranchiata

Order. Scutibranchiata.

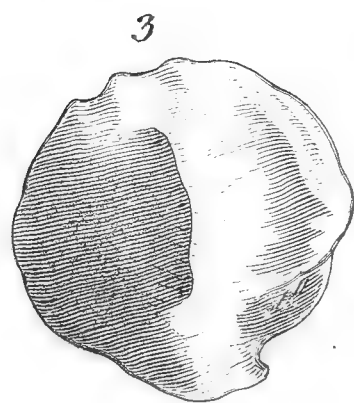
Family. Neritidæ.



*Nerita undulata.*



Articulated Oper.  
of *Nº 1*.

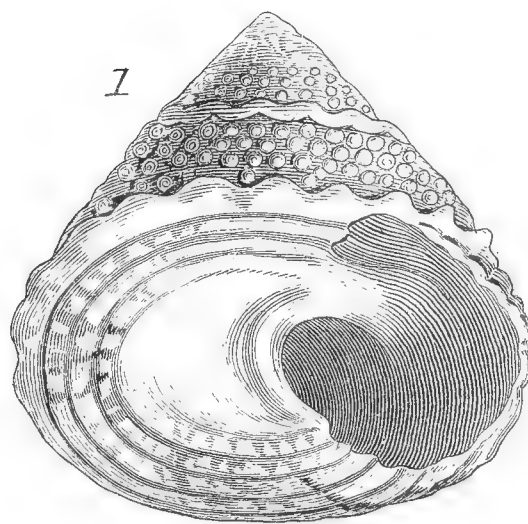


*Neritina Oweniana.*

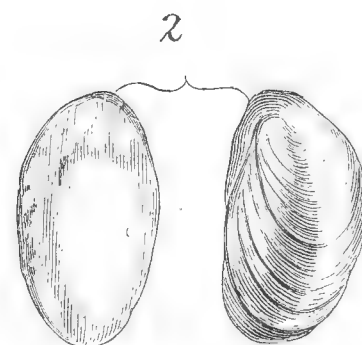


*Neritina cariosa.*

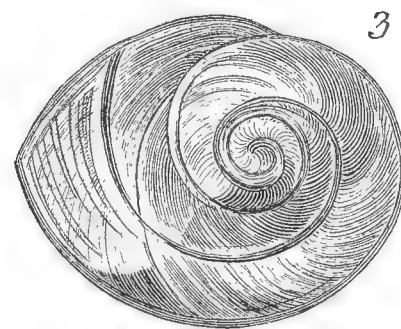
Family. Turbinidæ.



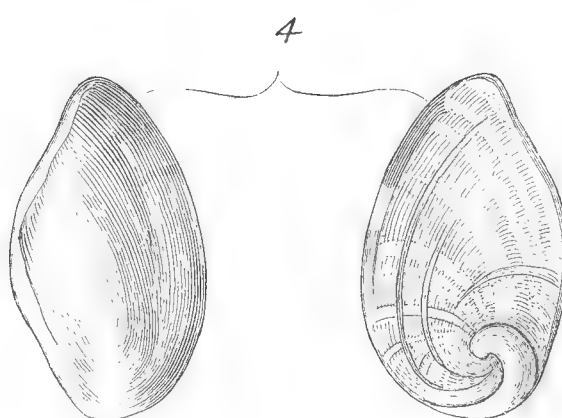
*Imperator gibberulus.*



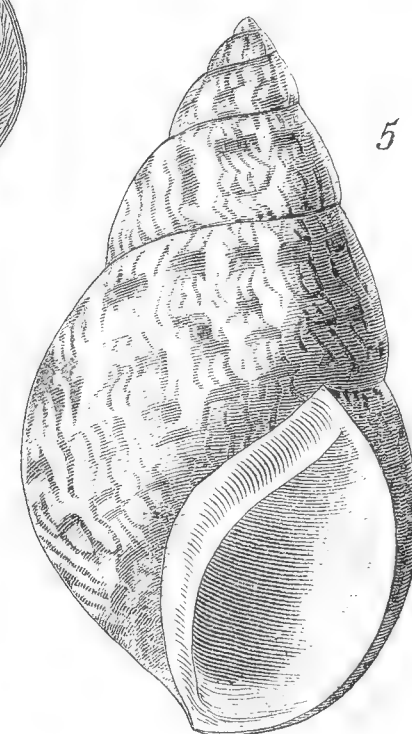
Oper. of *Nº 1*



Oper. *Turbo*



Operculum of *Phasianella australis.*

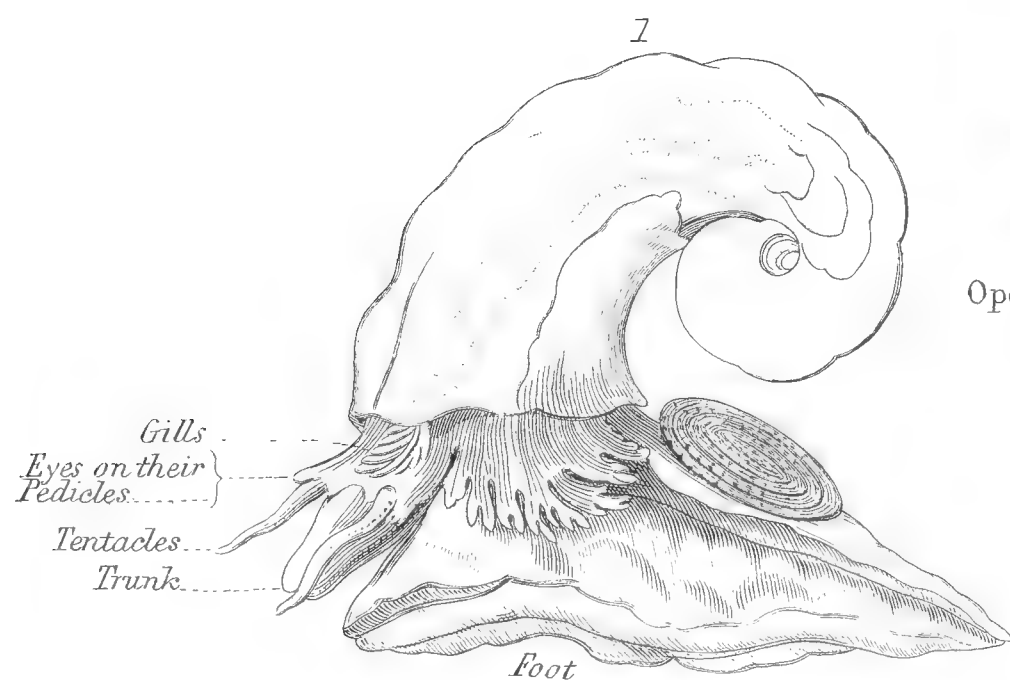


Operculum of *Phasianella australis.*

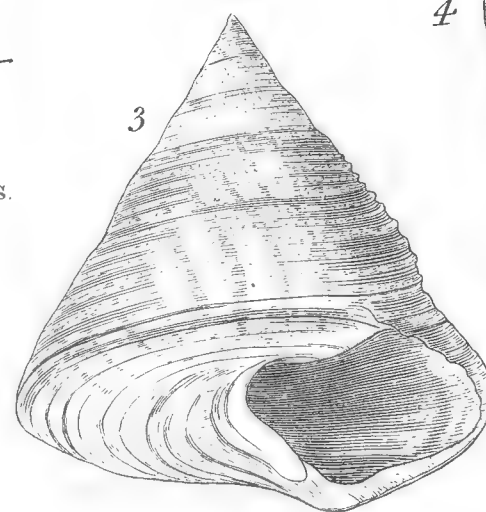
Family. Trochidæ.



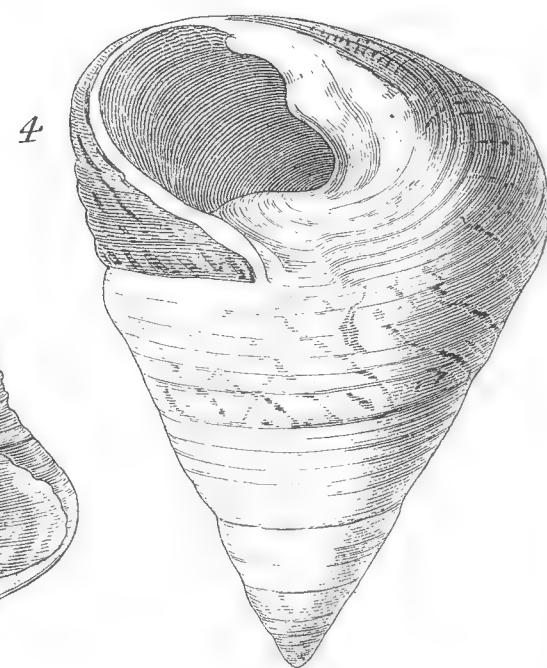
Operculum of *Trochus pica*



*Animal of Trochus pica.*

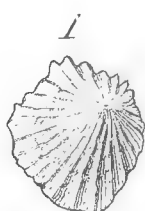


*Trochus ziziphinus.*

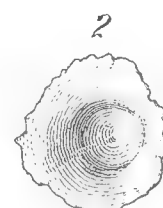


*Tegulapellis Serpentis.*

Family. Gadiniidæ.



*Gadinia atra.*





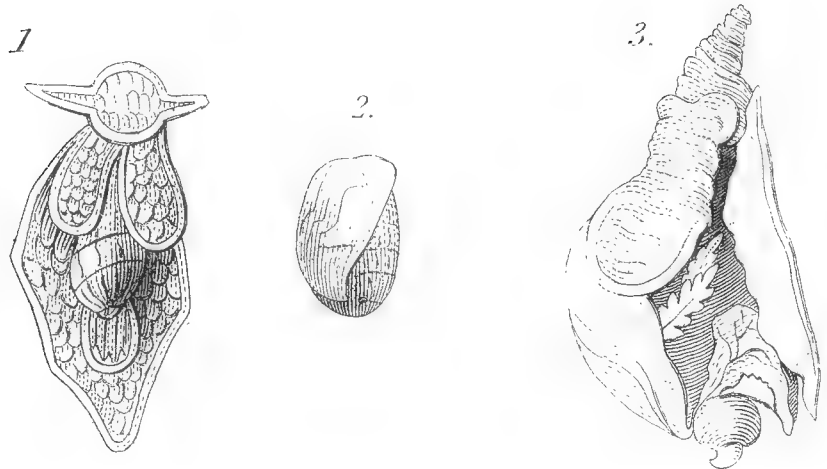


Class. Gasteropoda.

Sub-class. Heterobranchiata.

Order. Pleurobranchiata.

Family. Amphistridae



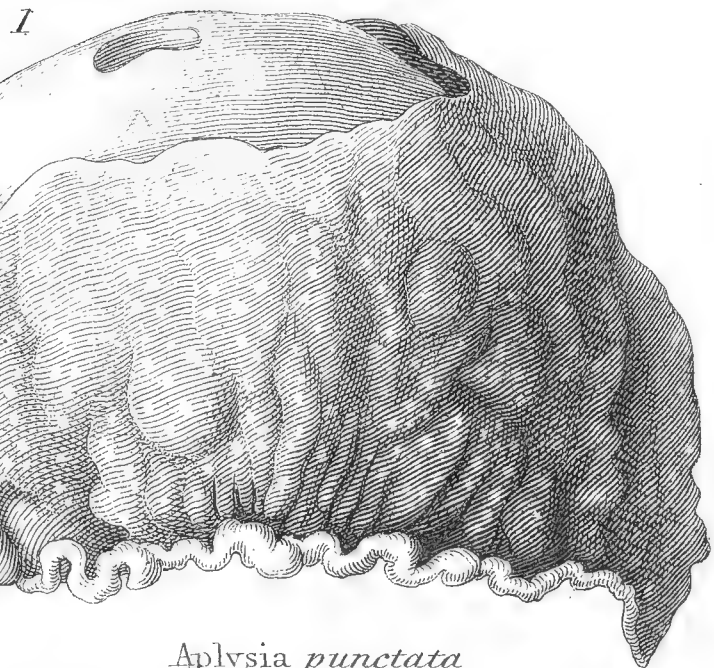
1 3. Bullinula Undata.

Family. Bullidae.

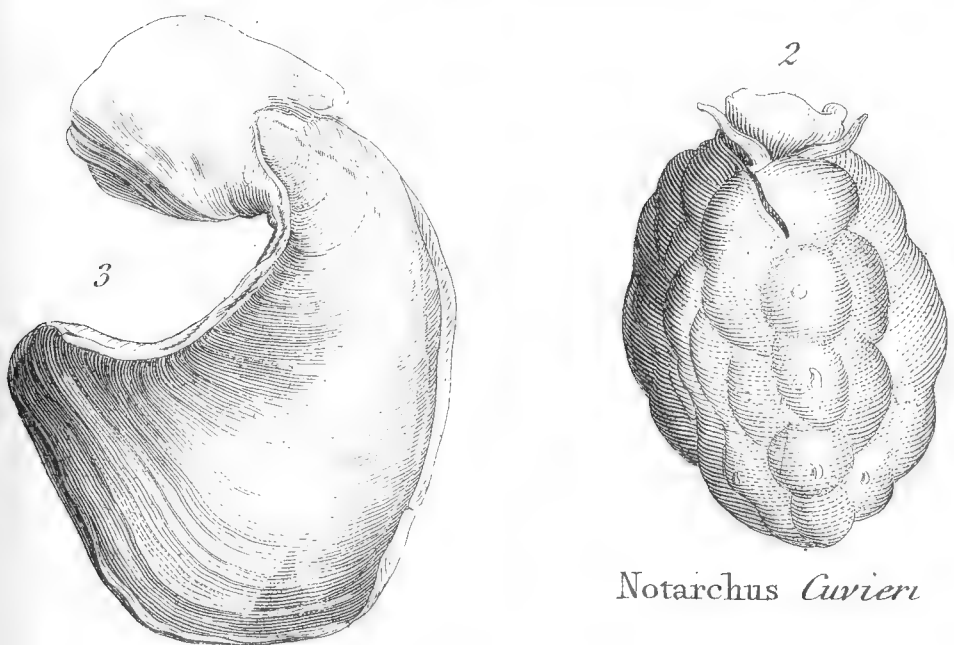


Akera carnosia

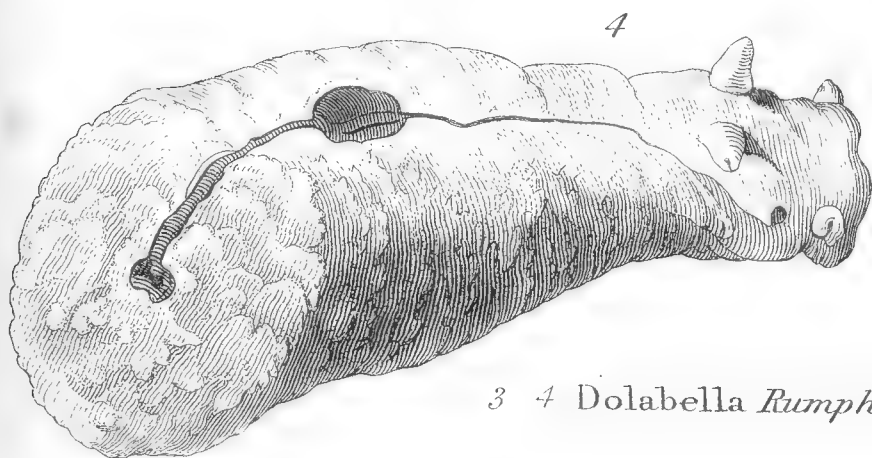
Family. Aplysiidae.



Aplysia punctata

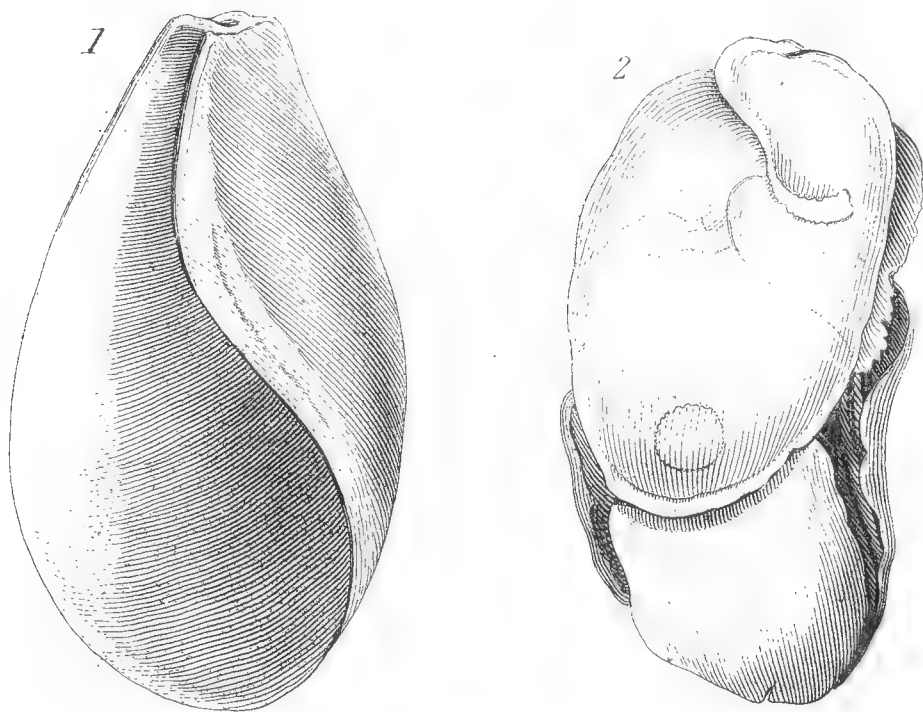


Notarchus Cuvieri

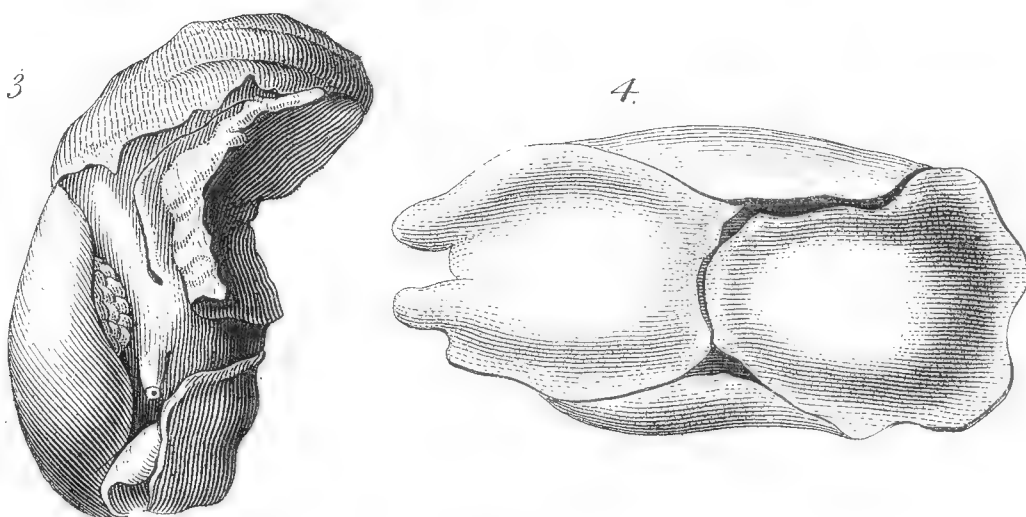


3 4 Dolabella Rumphii

Family Philinidae.

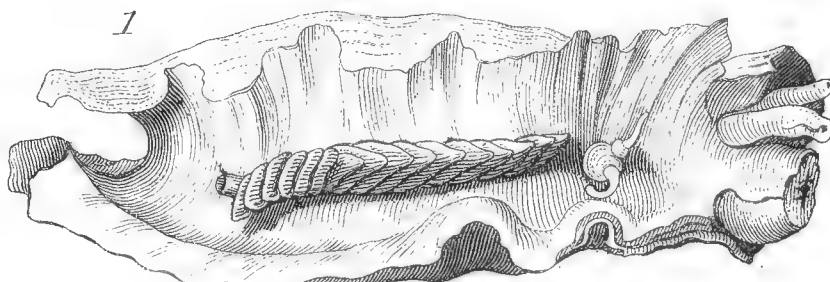


1 2 Scaphander lignarius



3 4 Phyllina aperta

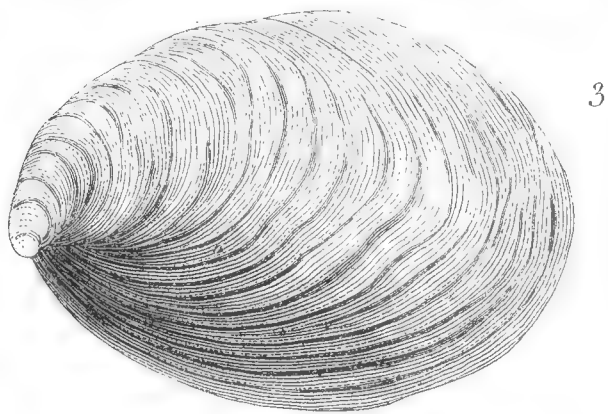
Family. Pleurobranchidae.



Pleurobranchus Peronii



2. 3. Oscanus (Pleurobranchus) membranaceus



3

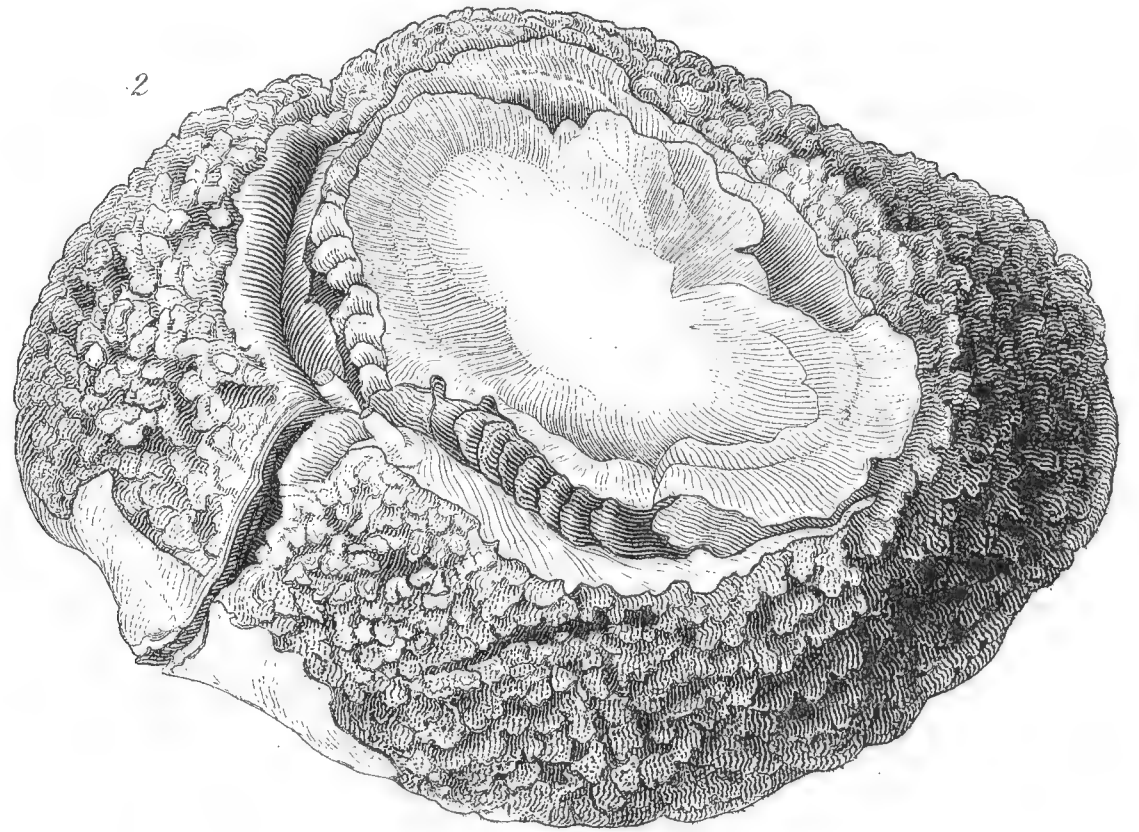
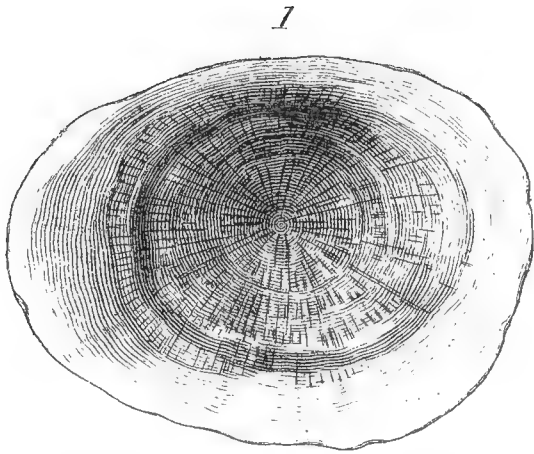


Class. Gasteropoda.

Sub-class. Heterobranchiata.

Order. Pleurobranchiata.

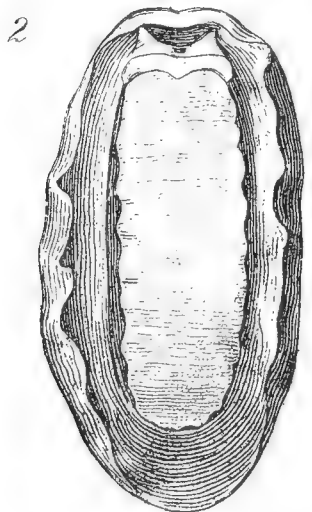
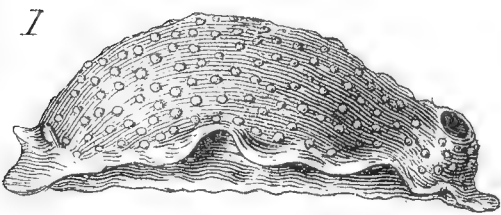
Family. Umbrellidæ.



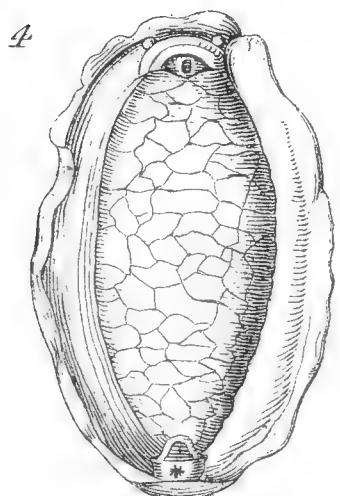
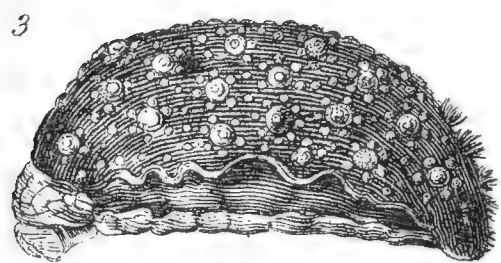
1 2 *Umbrella umbellata*.

Order. Gymnobranchiata.

Family. Onchidoridæ.

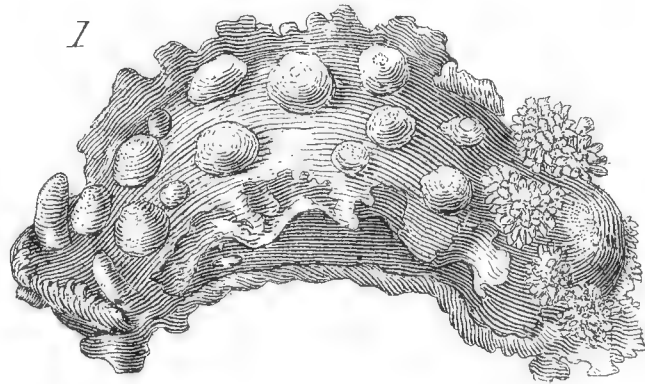


1 2 *Onchidoris leachii*.

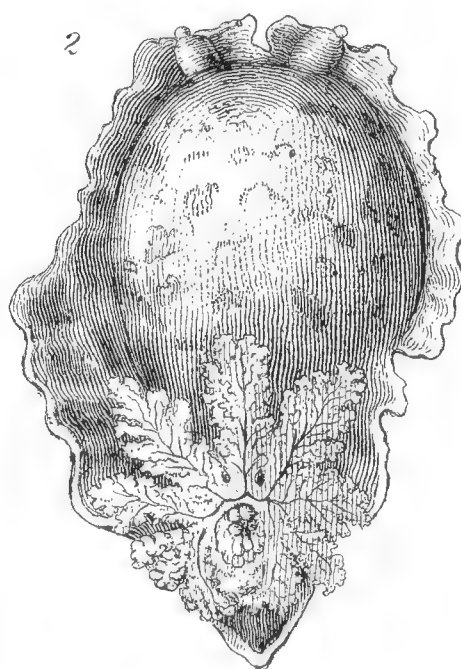


3 4 *Onchidoris (Peronia) mauritiana*.

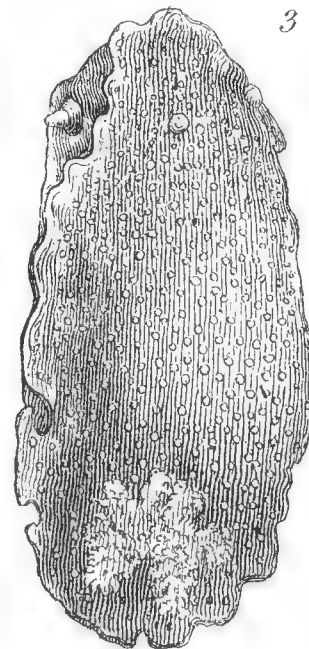
Family. Dorididæ.



*Hexabranhus laciniatus*.

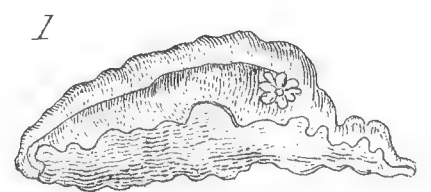


*Dendrodoris limbata*.

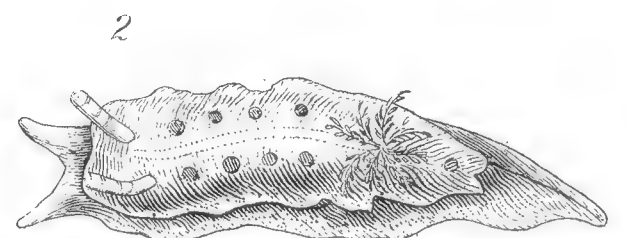


*Dendrodoris tuberculata*.

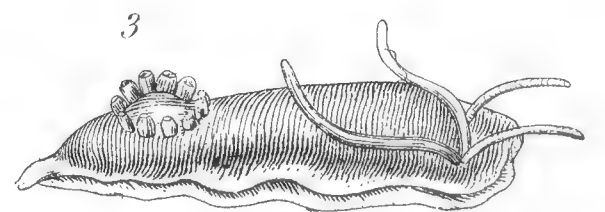
Family. Goniidoridæ.



*Goniidoris alvmarginata*.

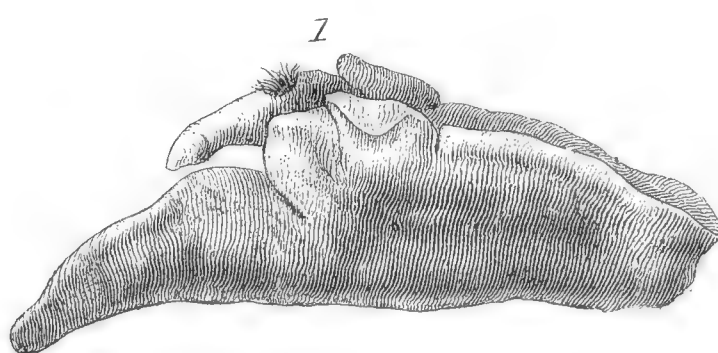


*Goniidoris nodosa*.



*Idalia quadricornis*.

Family. Ceratosomidæ.

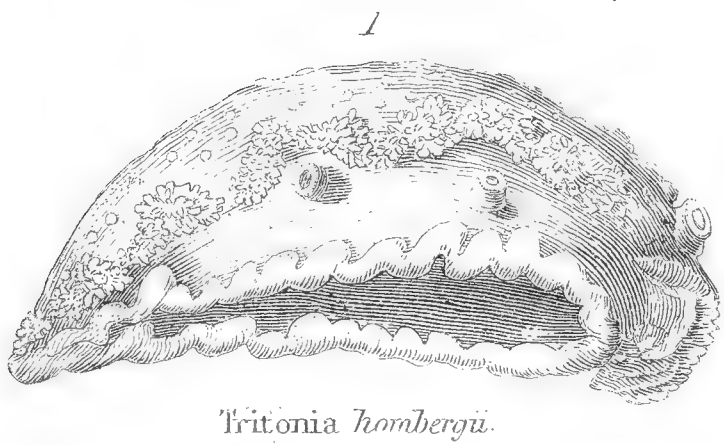


*Ceratosoma trilobata*.



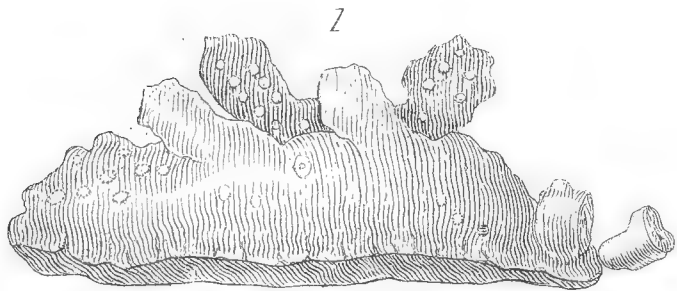


Family. Tritoniidæ.



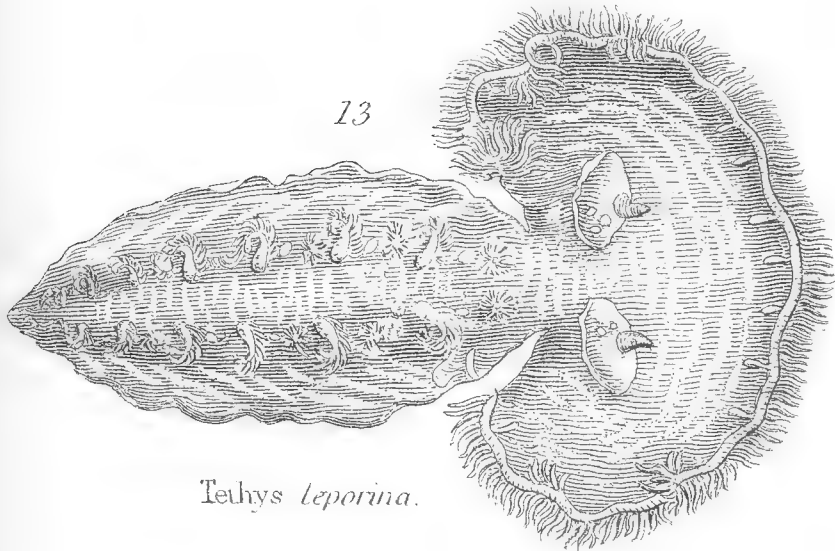
*Tritonia hombergii.*

Family. Scyllæidæ.



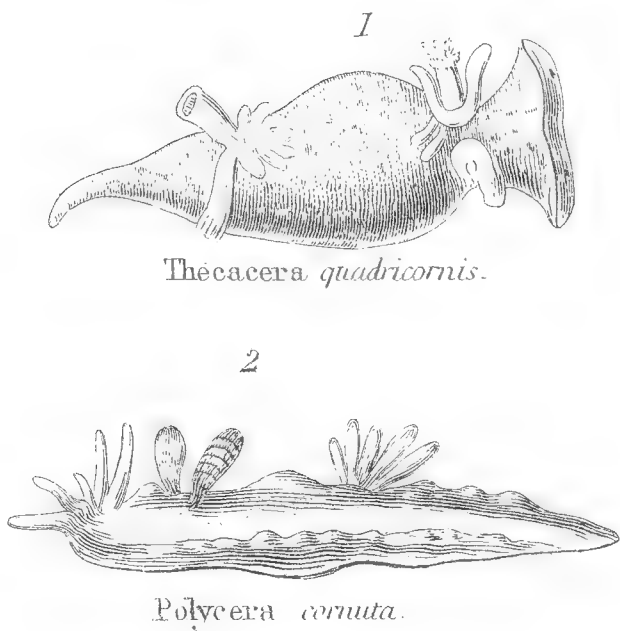
*Scyllæa pelagica*

Family. Tethyidæ.

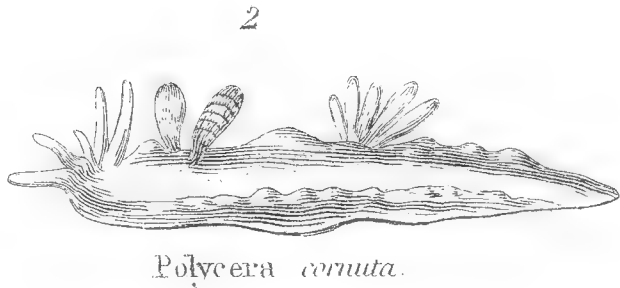


*Tethys leporina.*

Family. Polyceratidæ.

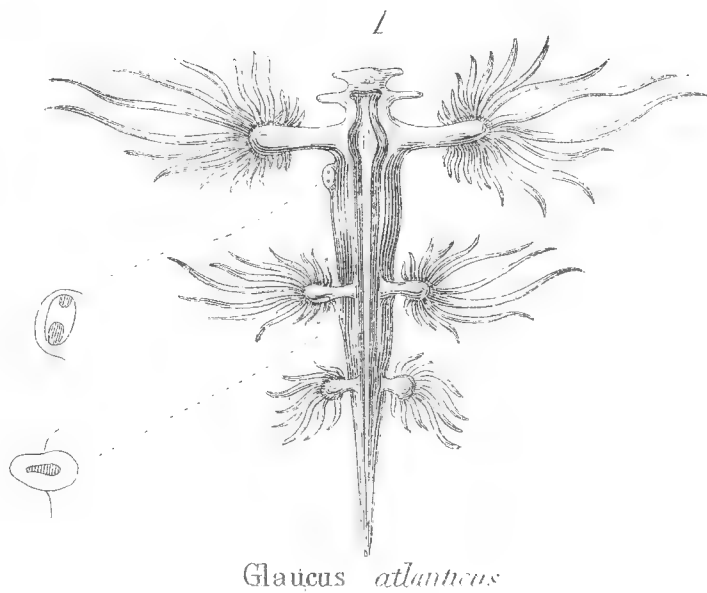


*Thécacera quadricornis.*



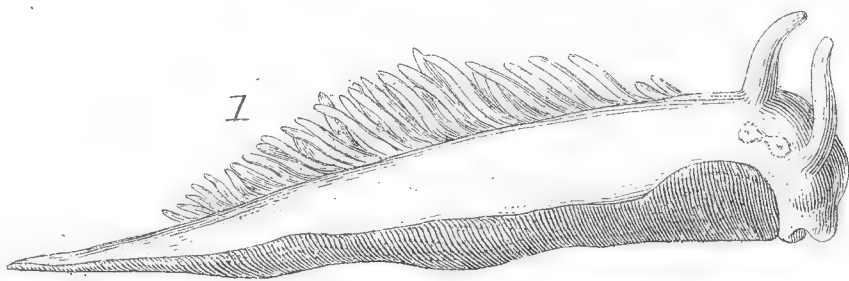
*Polycera cornuta.*

Family. Glaucidæ.

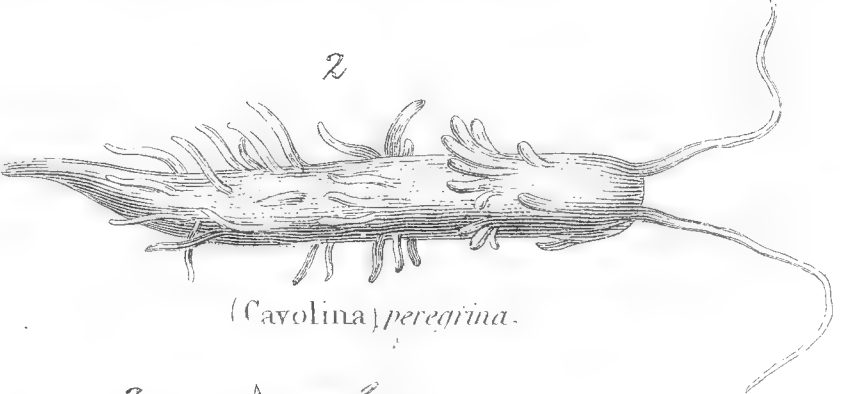


*Glaucus atlanticus*

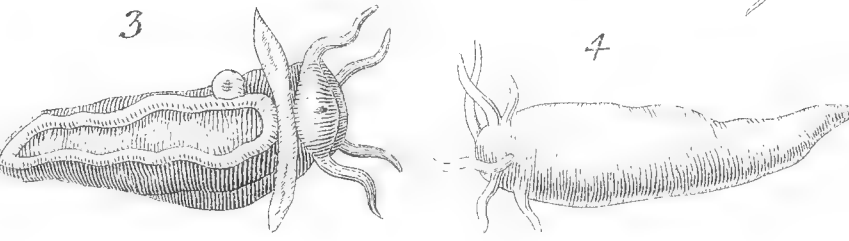
Family. Eolididæ.



*(Flabellina) cuvieri.*



*(Cavolina) peregrina.*



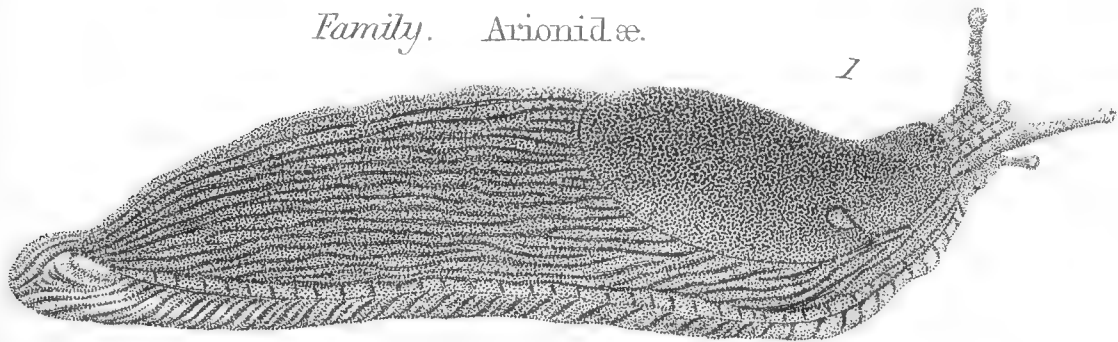
*3 4 (Tergipes) lamareckii.*



*Glaucus efforti.*

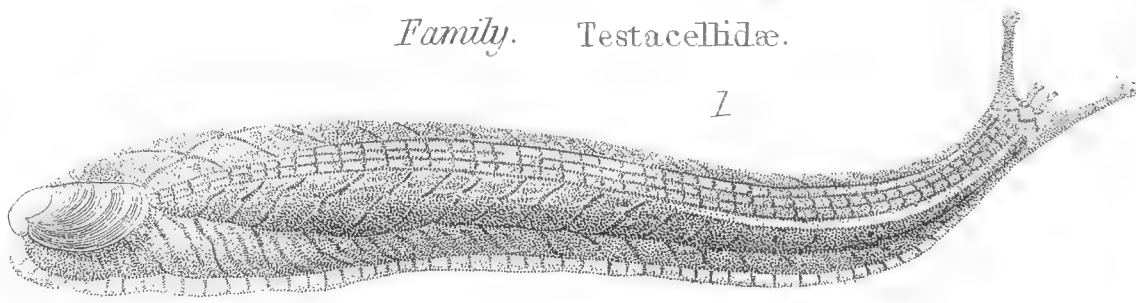
Order. Pulmonata.

Family. Arionidæ.

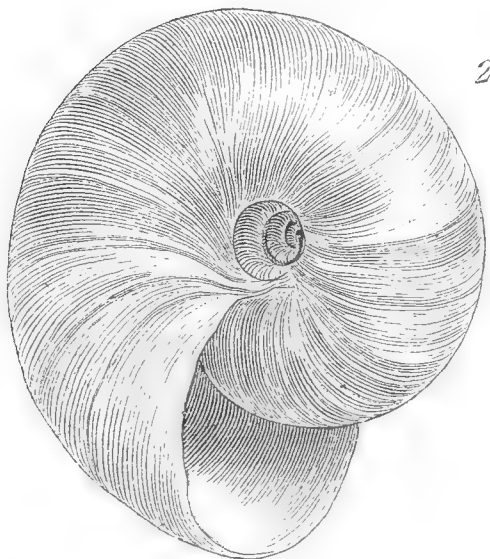


*Arion ater.*

Family. Testacellidæ.

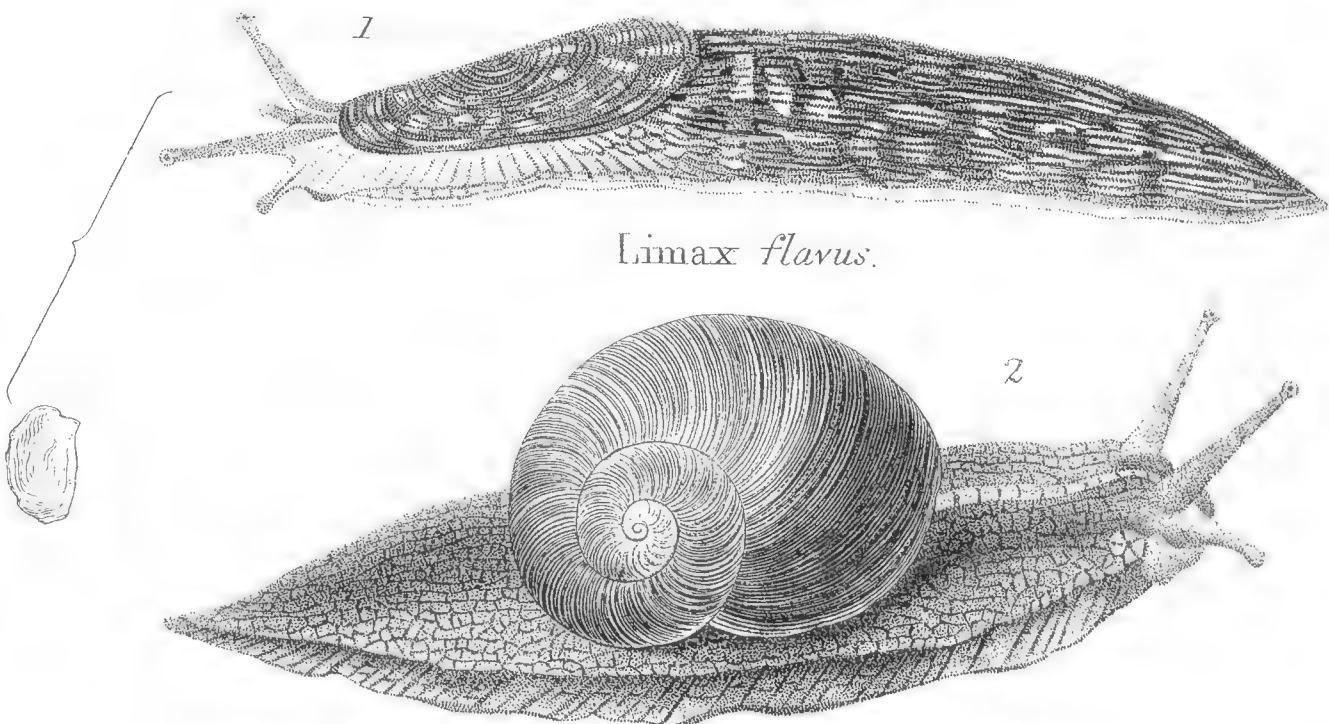


*Testacella maugei.*

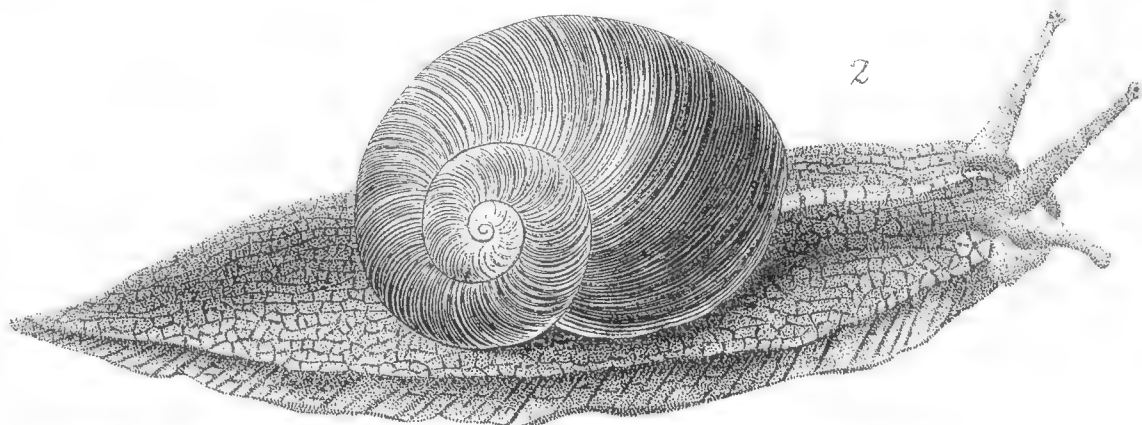


*Zonites Algira.*

Family. Helicidæ.



*Limax flavus.*



*Helix naticoides.*



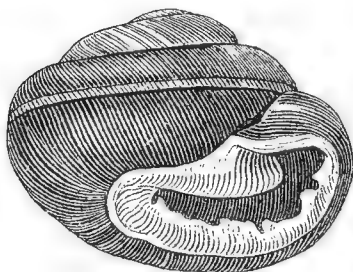
Class. Gasteropoda.

Sub-class. Heterobranchiata.

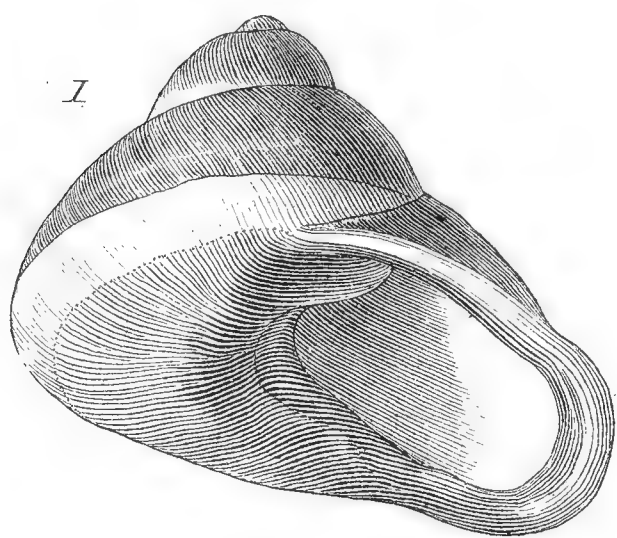
Order. Pulmonata.

Family Helicidæ

2

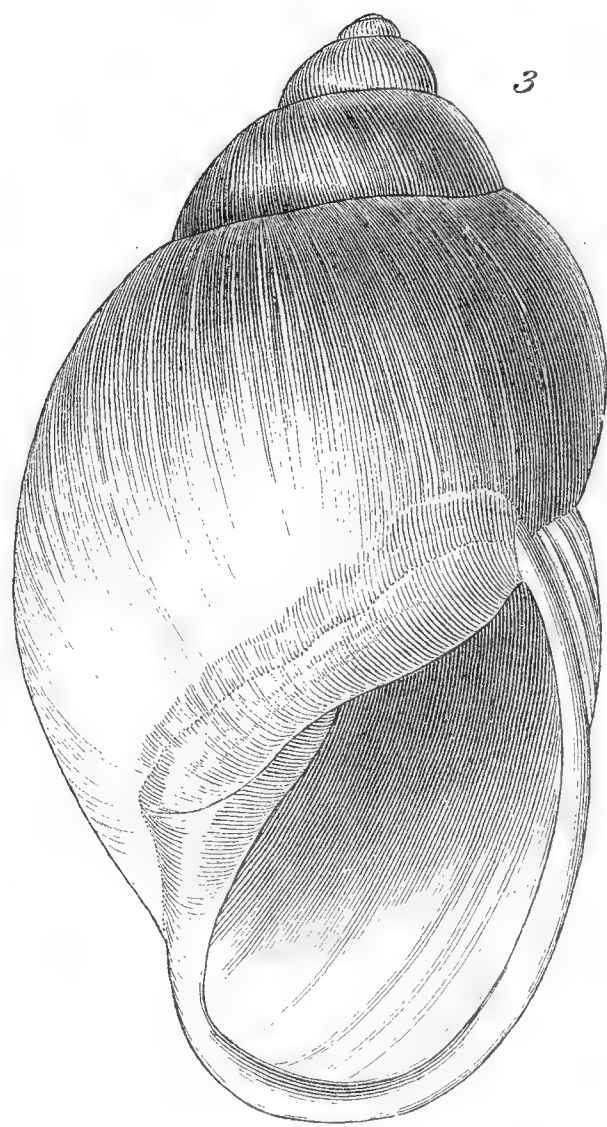


*Nux denticulata.*



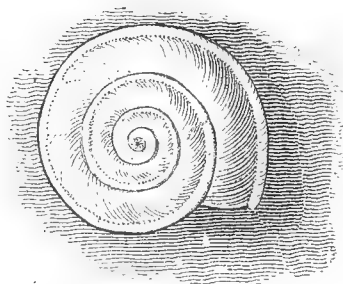
*Helix hamastoma.*

3

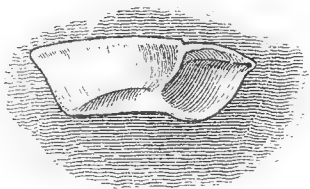


*Bulimus ovatus.*

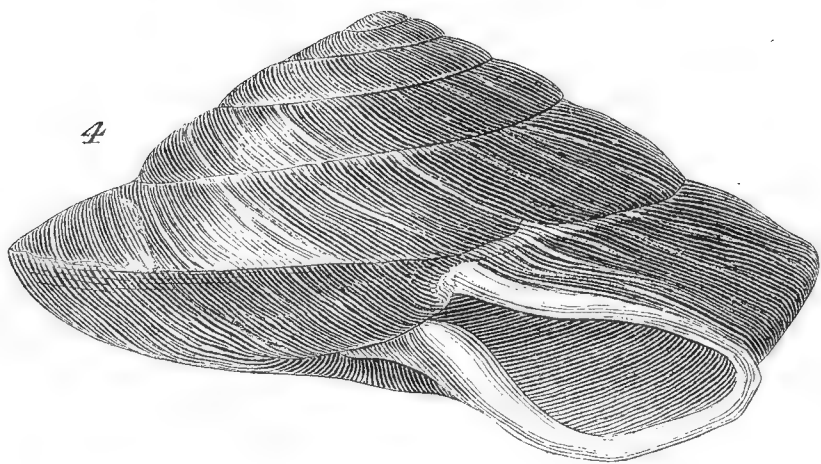
5



*Sheba albeta.*

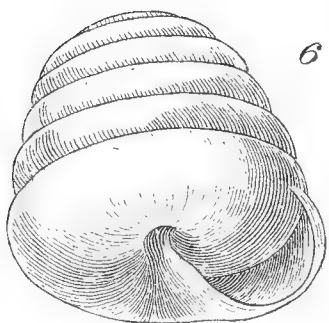


4



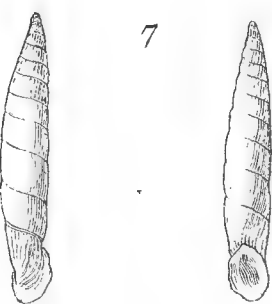
*Iberus carocolla.*

6



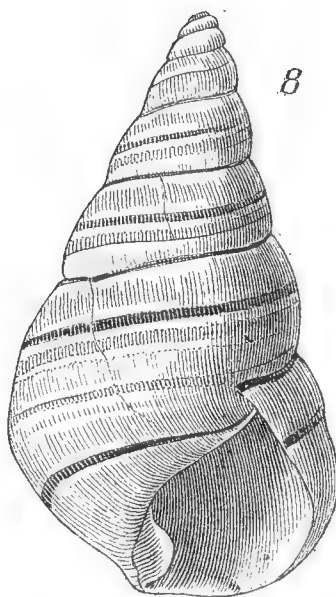
*Helix epistylum.*

7



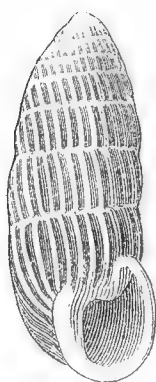
*Clausiha cerulea.*

8



*Achatina virginea.*

9



*Pupa mumia.*

Family. Lymnæidæ.

1



*Physa rivatis.*

Family. Siphonariadæ.

1

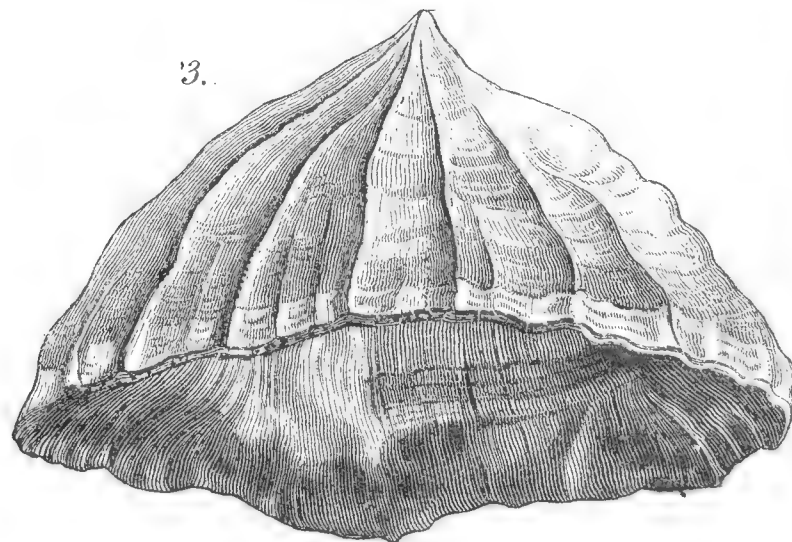


2



*Siphonaria radiata.*

3.



*Siphonaria grandis.*





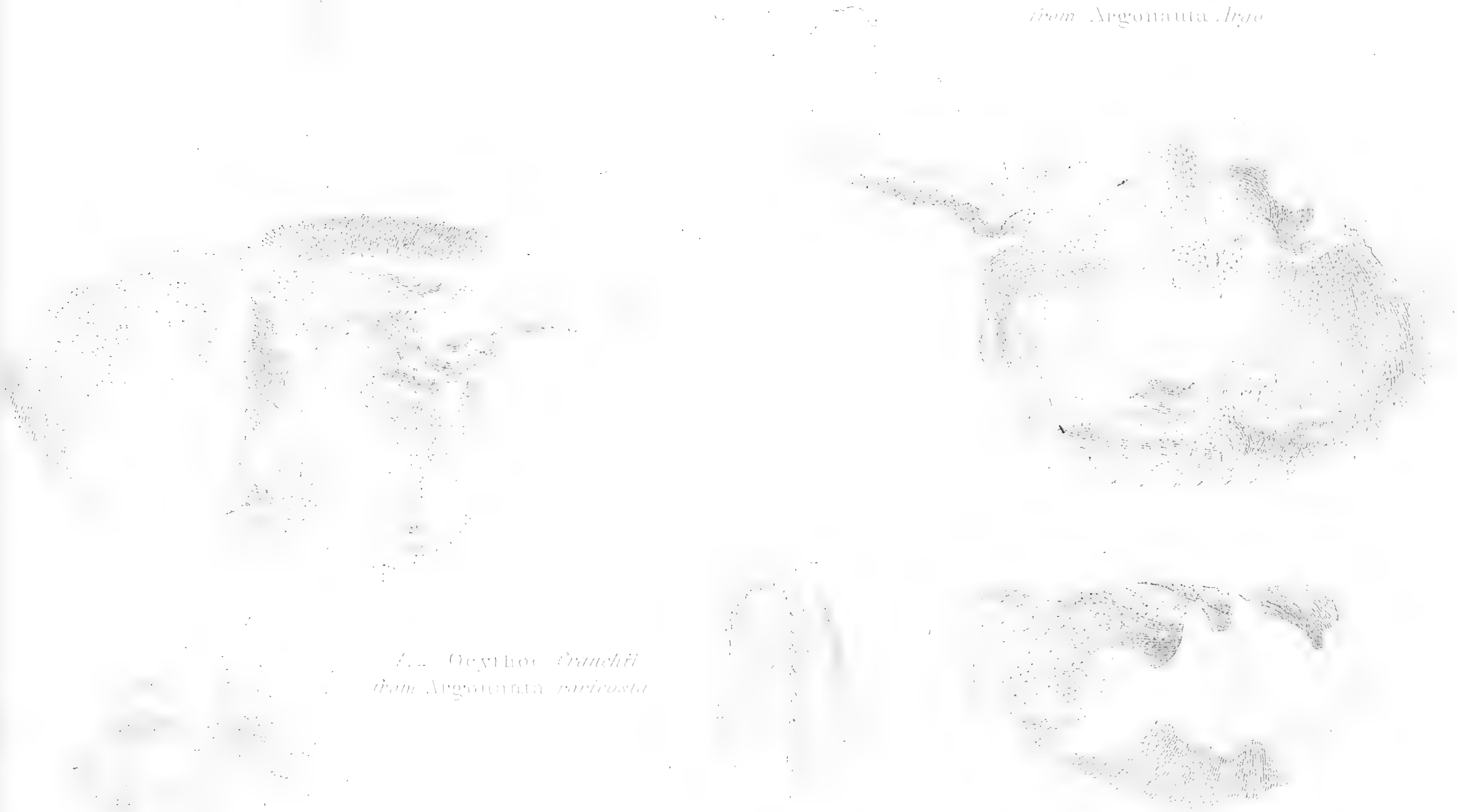
Class Cephalopoda.

Order Octopoda.

## The Sailing Cuttle Fish from the Paper Nautilus.



*Ocyropsis antiquorum*  
from Argonauta Argo

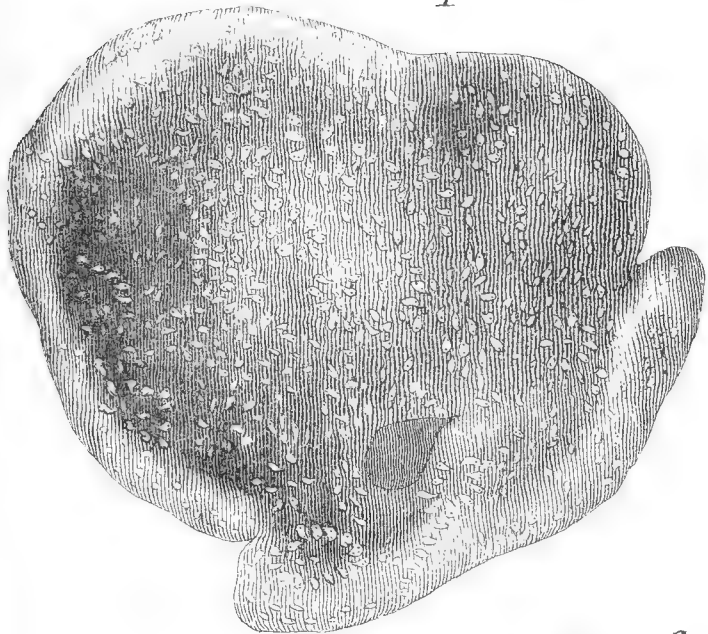


*Ocyropsis franchii*  
from Argonauta varicosata

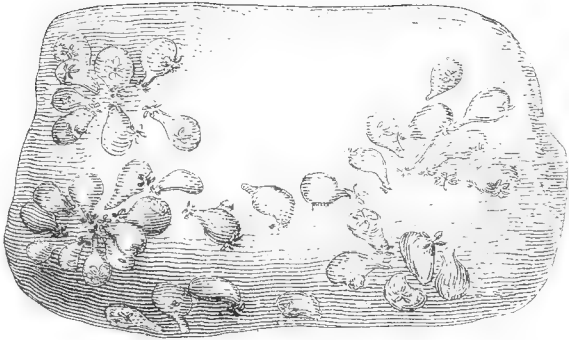
1. The animal out of the shell, 2. the front arm showing the dilatation, 3. the animal expanded showing the 8 arms the anterior pair being dilated at the end & the sides, the body encased by the ribs of the shell, 4, 5. the animal partly contracted, 6. the animal with its arms retracted in the shell, 7, 8. the side & top view of the animal partly contracted in its shell; the shell broken at the keel to show the interior.



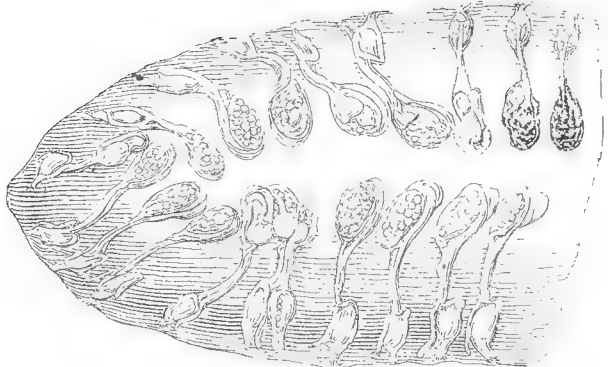
1



2



3



1. 3 *Distoma rubrum* Sav.

5

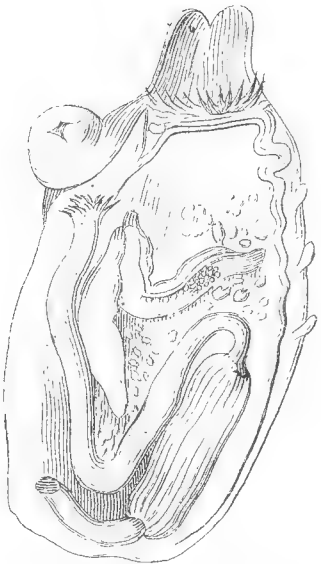


6



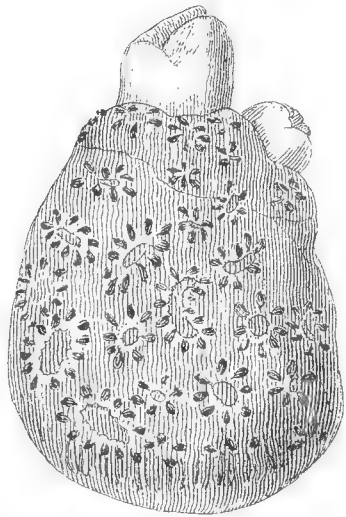
5 6 *Clavelina borealis*

4



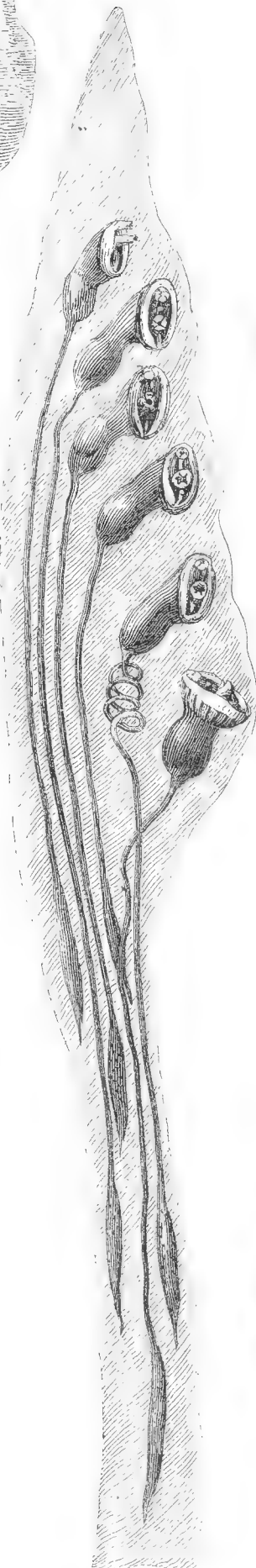
*Cynthia canopus*

7



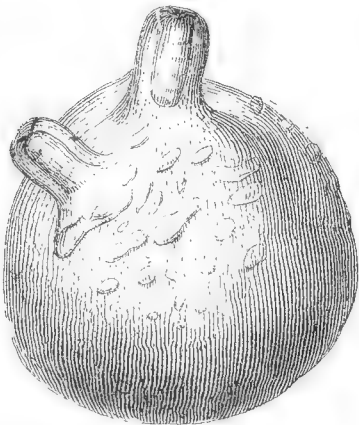
7. 8 *Botryllus polycylus*

10



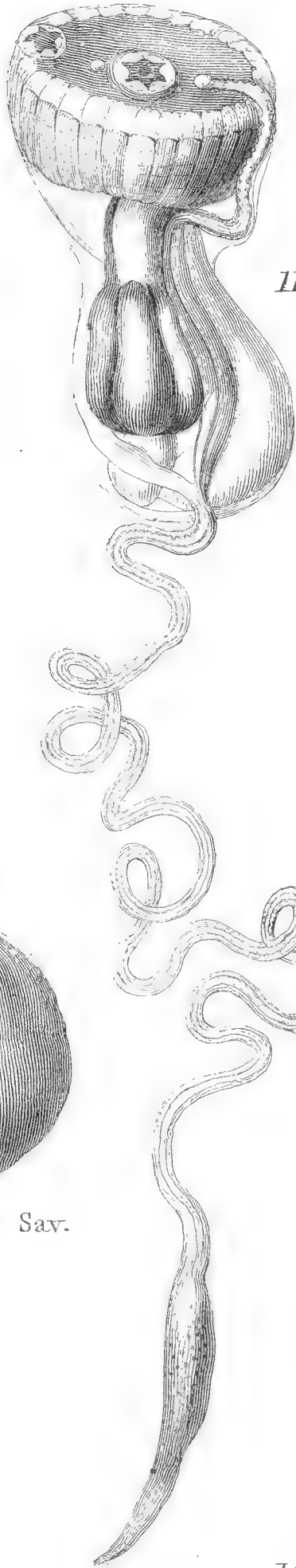
10. 11 *Sigillina australis*

9

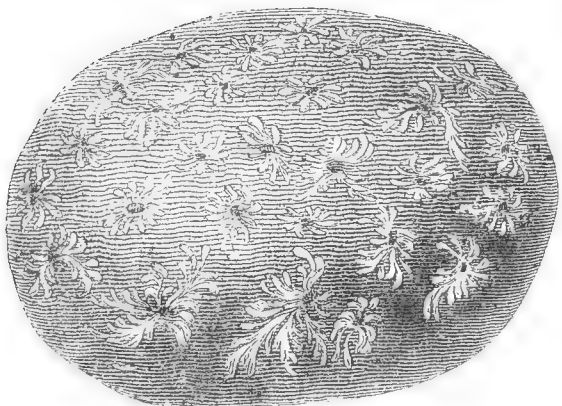


*Cynthia momus* Sav.

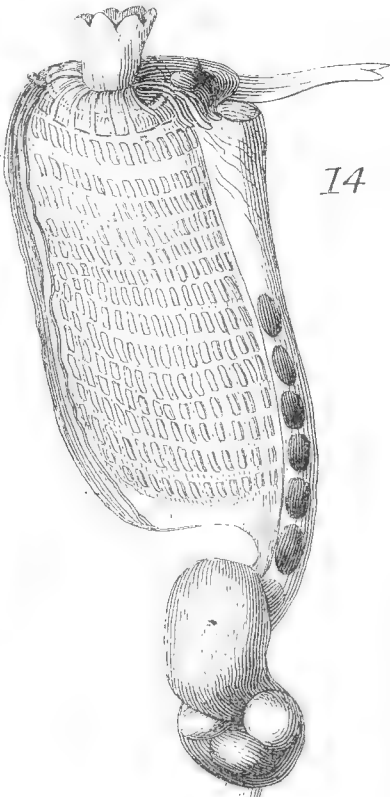
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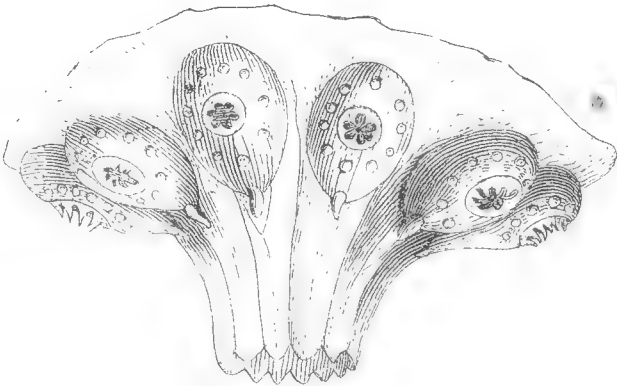
12



14



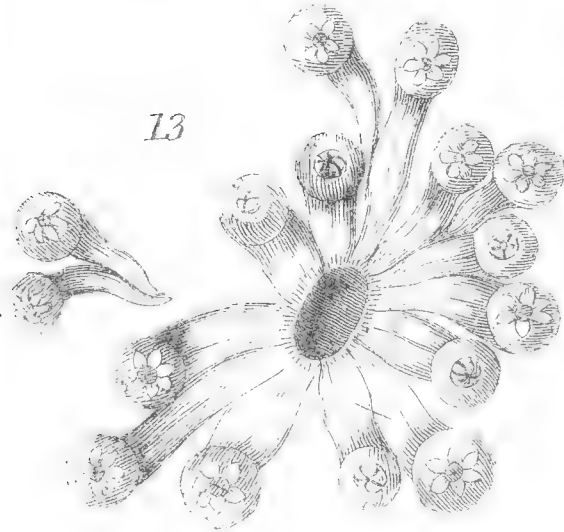
8



16



13



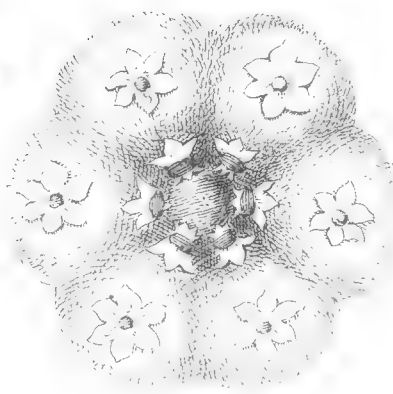
12 14 *Polyclinum constellatum*

15



15. 17 *Synoicum turgens*

17





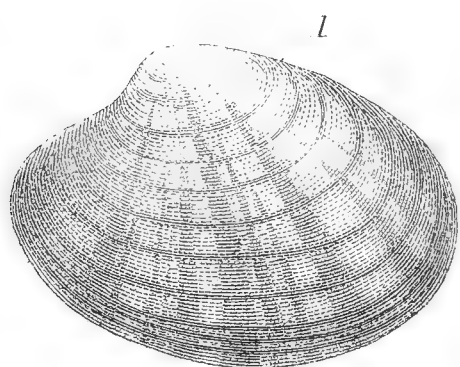


Class. Conchifera.

Orders. Veneracea.

Sub-class. Siphonophora.

Pholadacea.



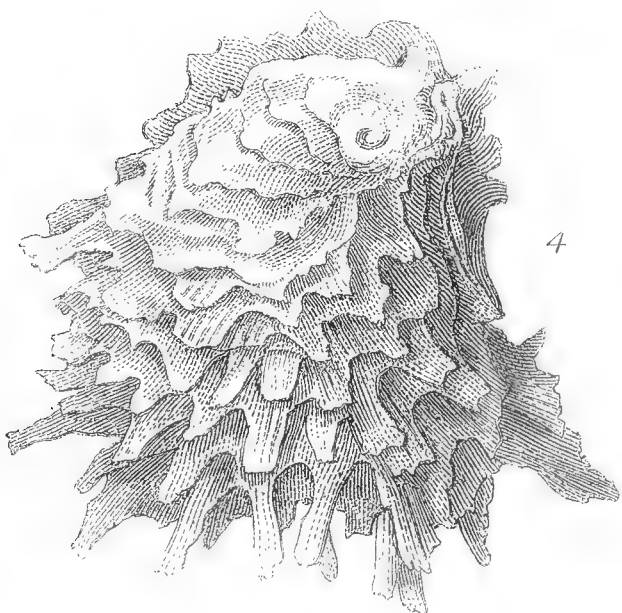
Veneridæ. — *Dione chione*.



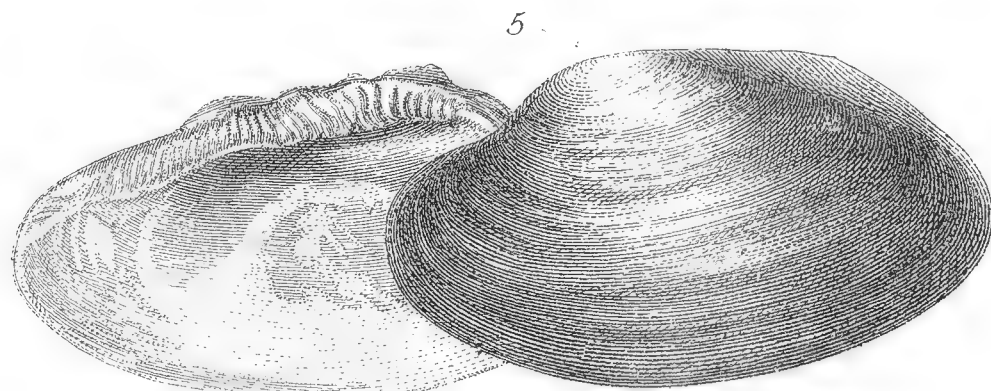
Tellinidæ. — *Tellina radiata*.



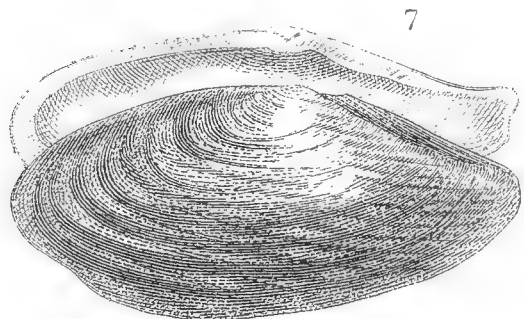
Mactridæ. — *Mactra stultorum*.



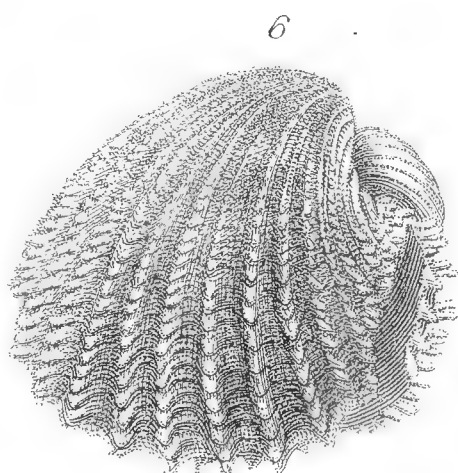
Chamidæ. — *Chama lazarus*.



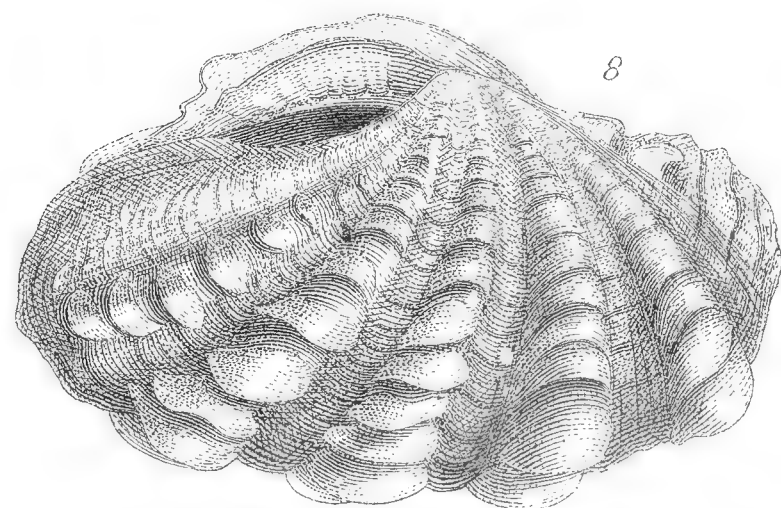
Mutellidæ. — *Pleiodon ovatum*.



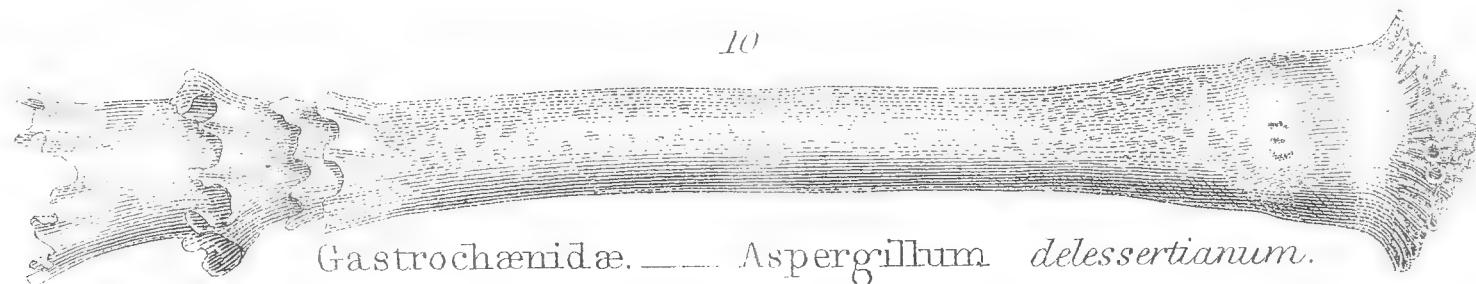
Ledaæ. — *Yoldia lanceolata*.



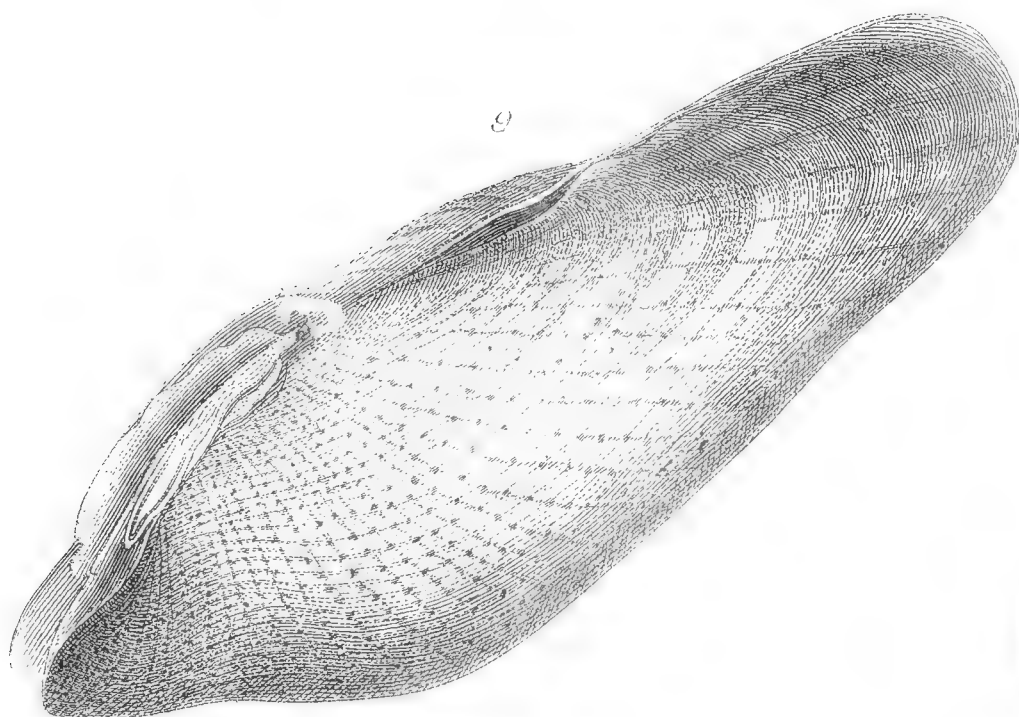
Cardiidæ. — *Cardium hians*.



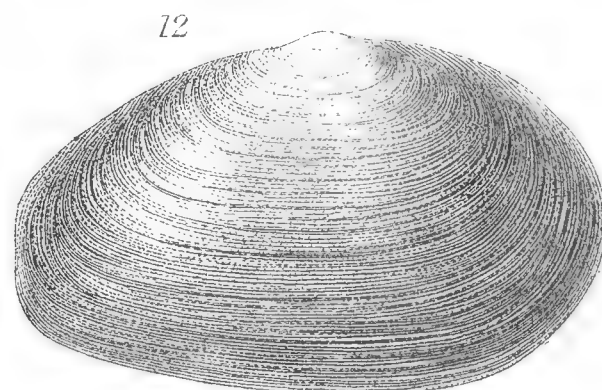
Tridacnidæ. — *Tridacna crocea*.



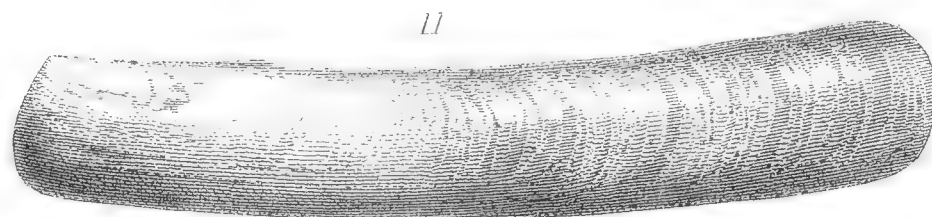
Gastrochænidæ. — *Aspergillum delessertianum*.



Pholadidæ. — *Pholas dactylus*.



Myadæ. — *Mya arenaria*.



Solenidæ. — *Solen ensis*.

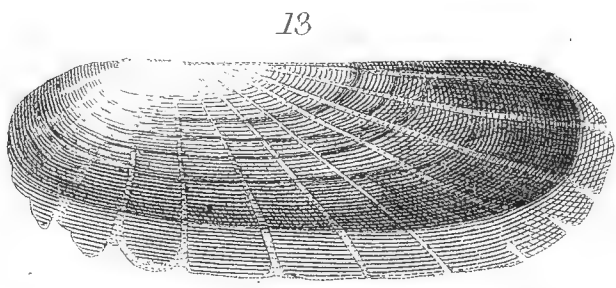




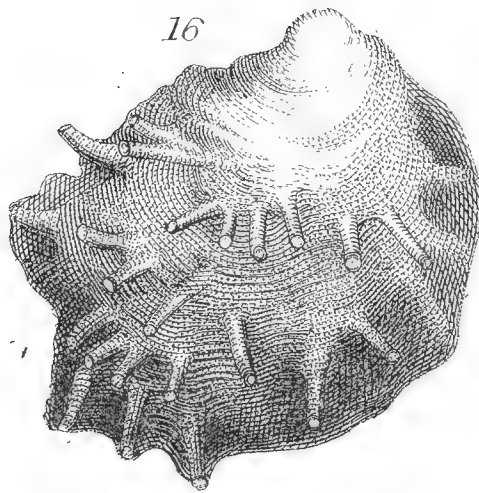
# MOLLUSCA.

Class. Conchifera. Sub-class. Asiphonophora.  
 — Brachiopoda.  
 — Pteropoda.

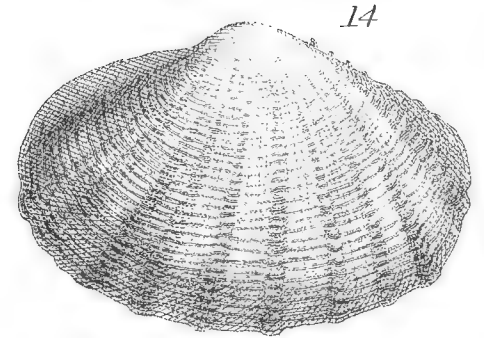
Orders Lasiacea.  
 — Unionacea.  
 — Pectinacea.



Solenomyidæ. — Solenomya Mediterranea.

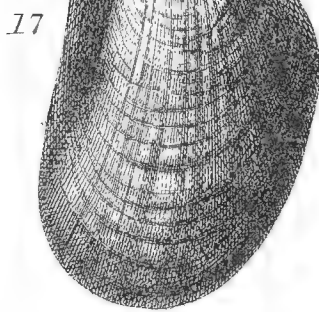
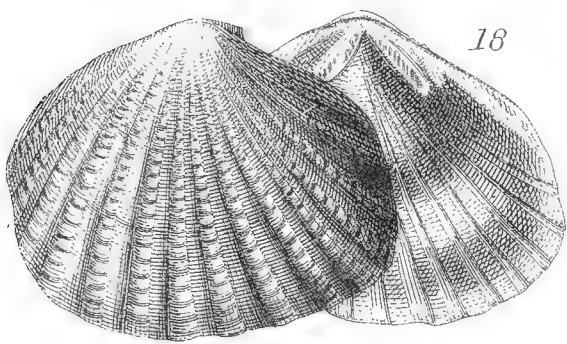


Ætheriidæ. — Ætheria Caillaudii.

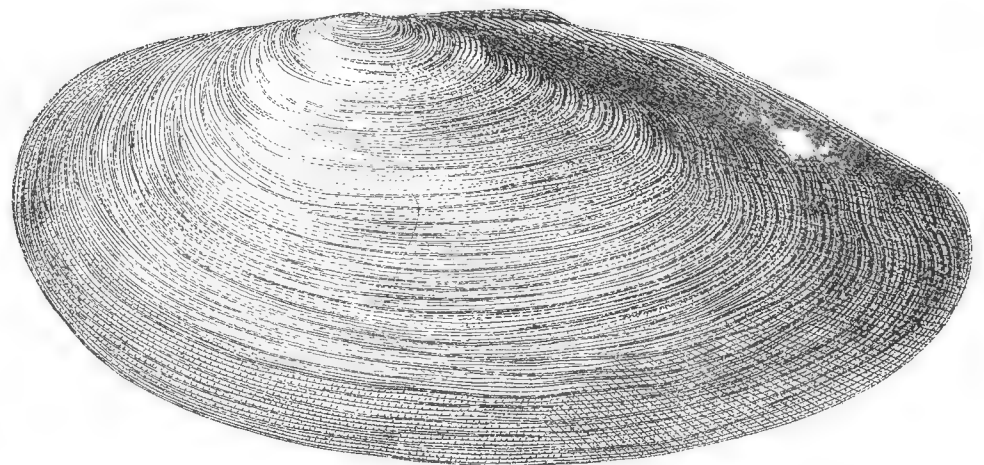


Lucimidæ. — Corbis fimbriata.

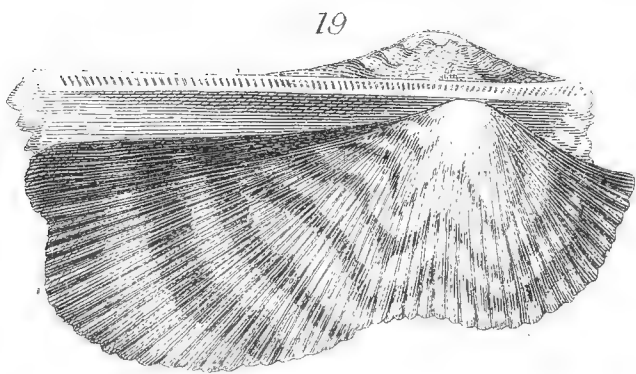
Trigomidæ.  
Trigonia pectinata



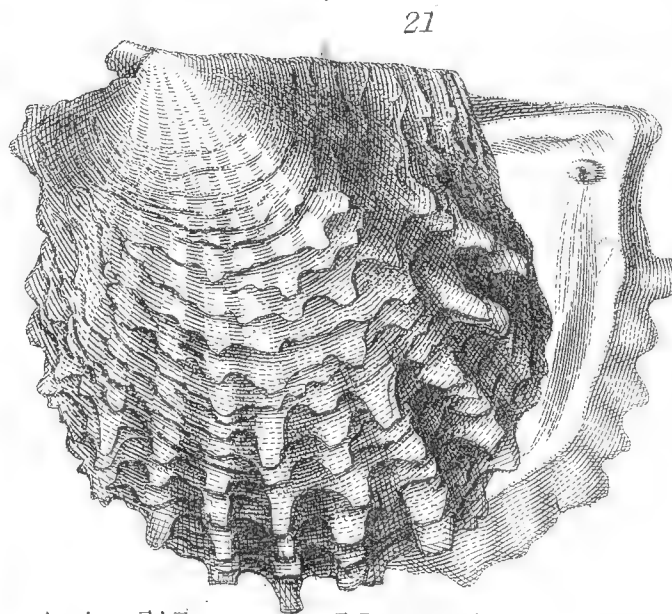
Mytilidæ. — Mytilus edulis.



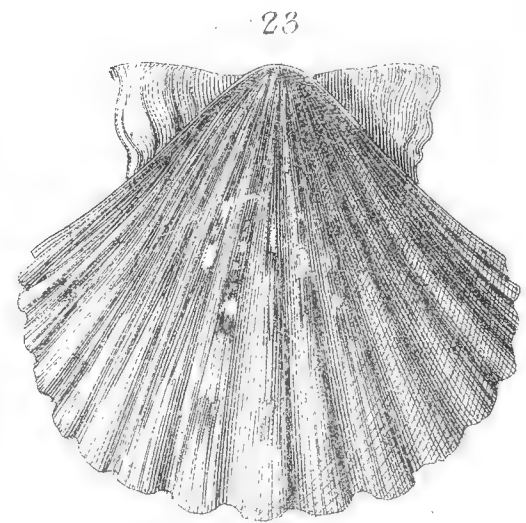
Unionidæ. — Anodonta cygnea.



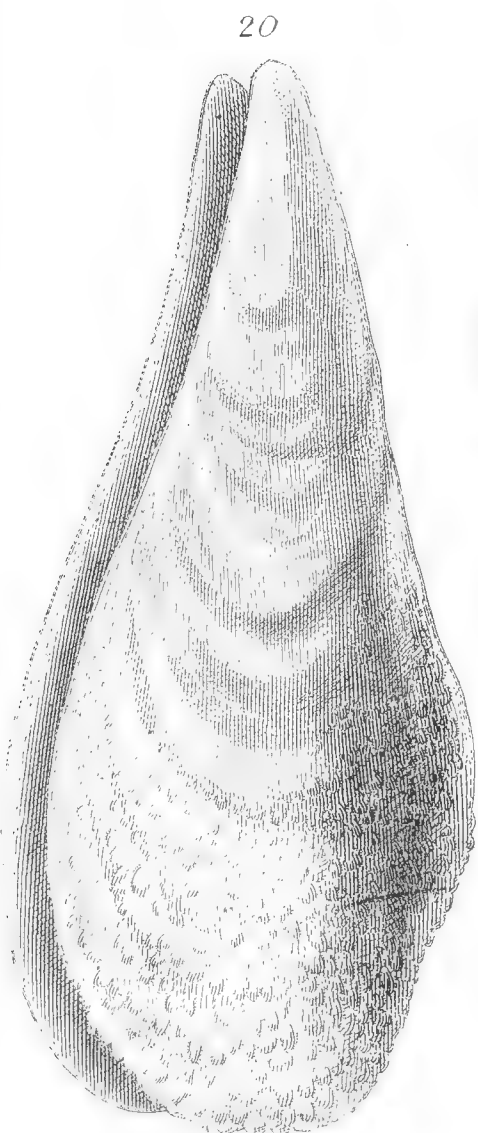
Arcadæ. — Arca Noë.



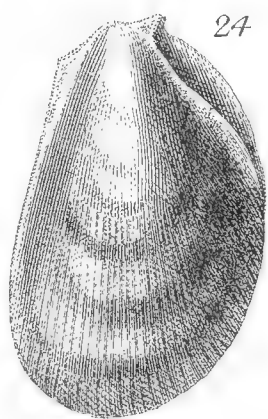
Aviculidæ. — Margarita margaritifera.



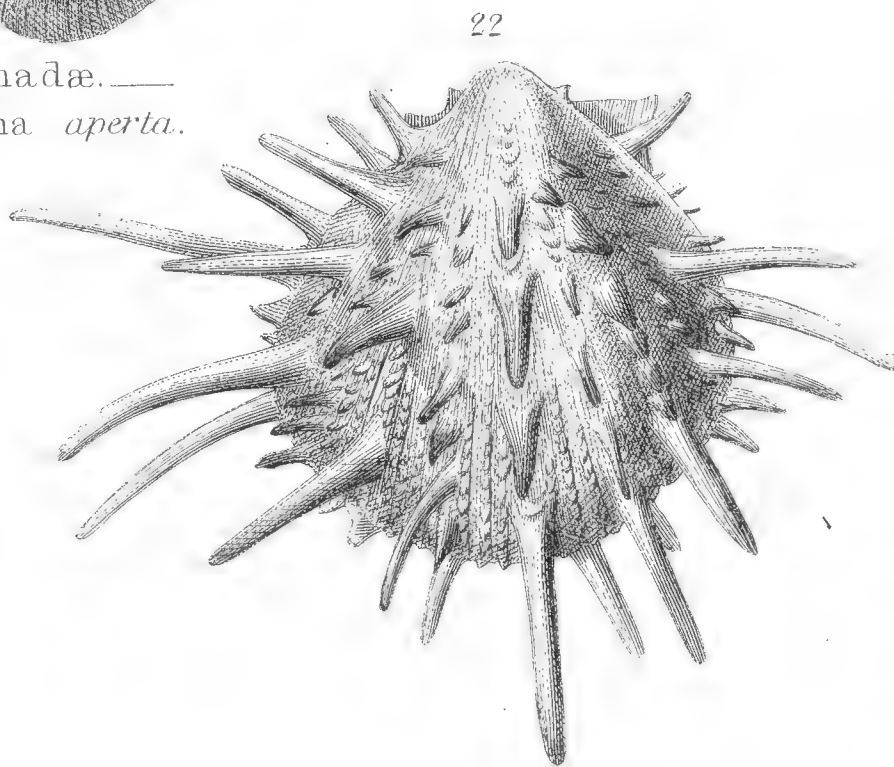
Pectenidæ. — Pecten Jacobæus.



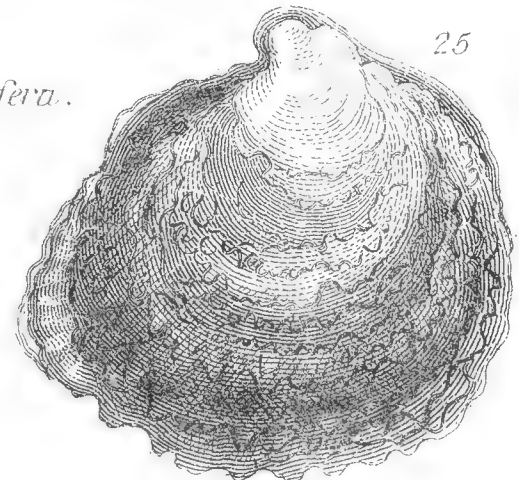
Pinnadæ. — Pinna squamosa



Limadæ. — Lima aperta.

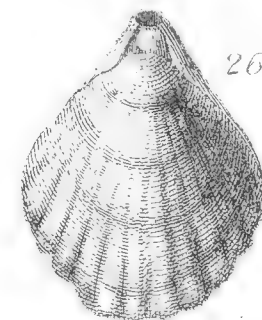


Spondylidæ. — Spondylus regius.



Ostreidæ. — Ostrea edulis.

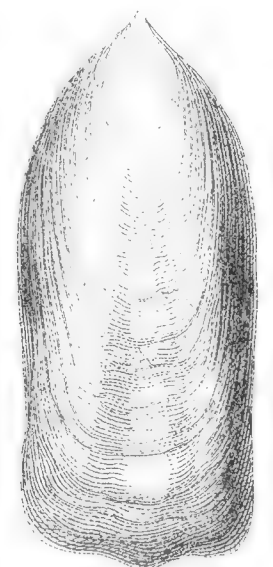
Terebratulidæ.



Terebratula australis.



Hyalæidæ.  
Cavolina tridentata

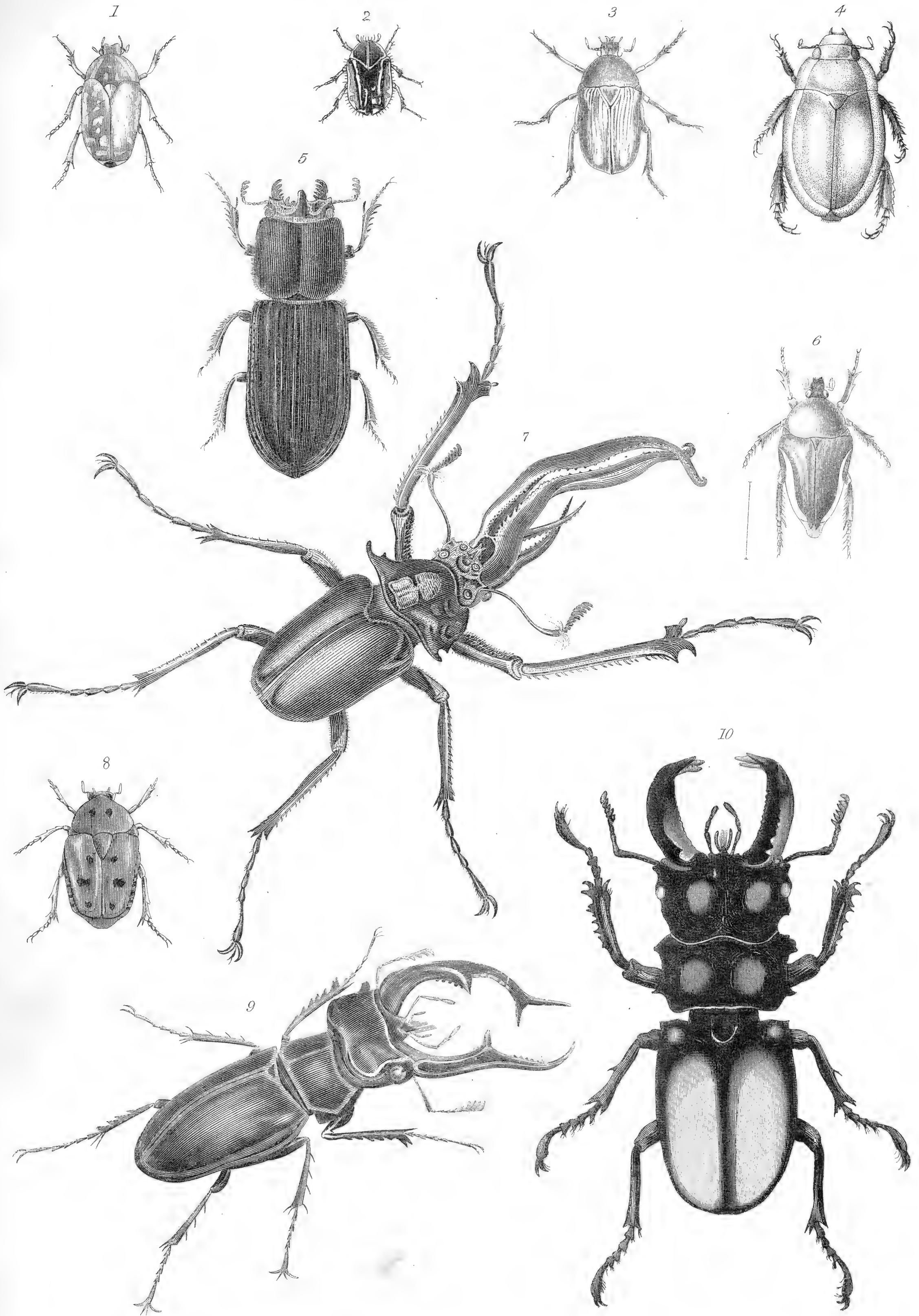


Lingulidæ.  
Lingula anatina





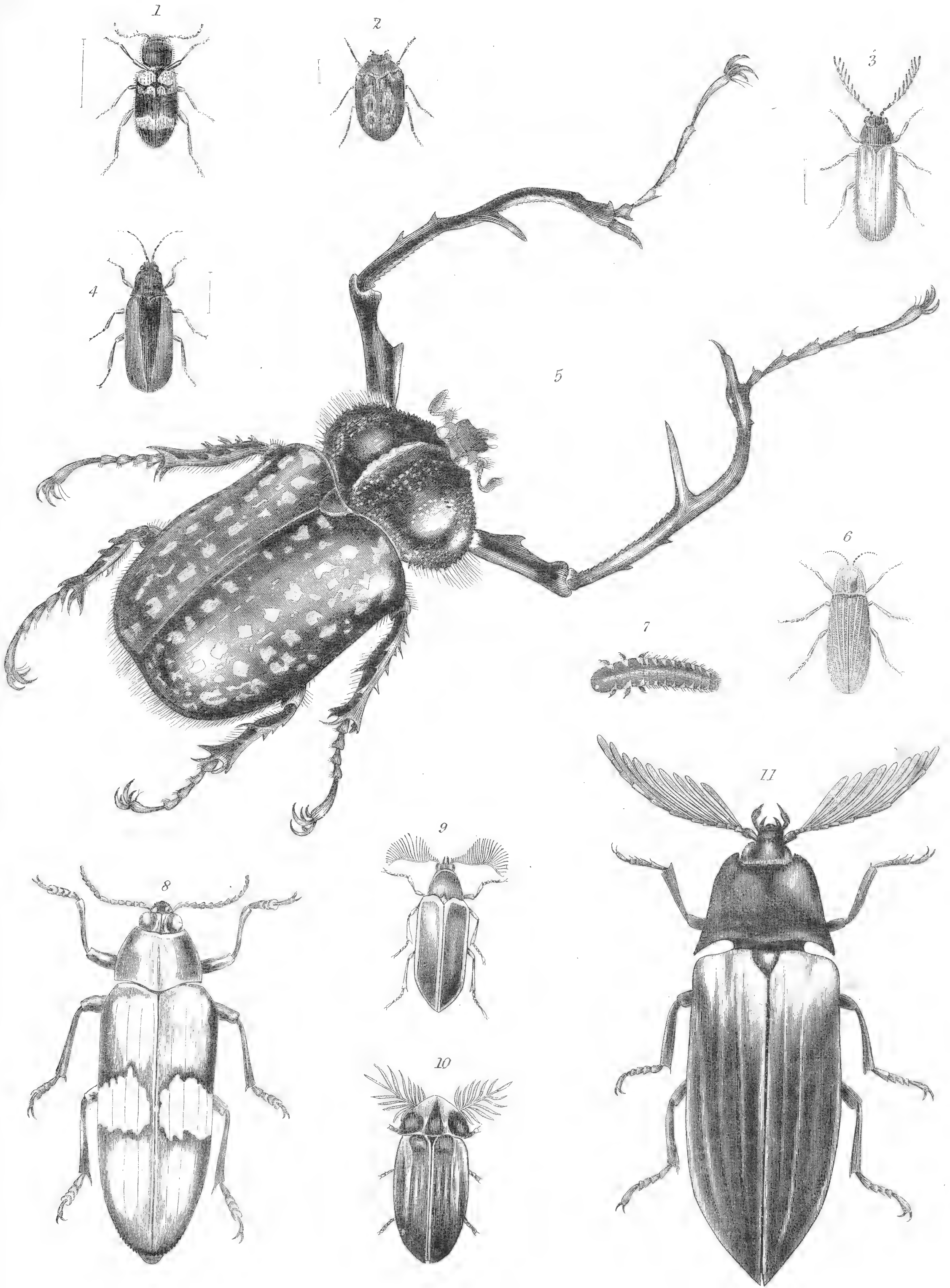
Order, COLEOPTERA.



- |   |                        |                                     |    |                       |                                    |
|---|------------------------|-------------------------------------|----|-----------------------|------------------------------------|
| 1 | Schizorhina Emiliae    | Emily's Green & Yellow Rose-Beetle. | 6  | Oxythyrea Helenæ      | Helen's Abyssinian Rose-Beetle.    |
| 2 | Clinteria Hoffmeisteri | Hoffmeister's Rose-Beetle.          | 7  | Chiasognathus Grantii | Scissor-jawed-Beetle, from Chiloe. |
| 3 | Trigonophorus Hookeri  | Dr. Hooker's Rose-Beetle.           | 8  | Schizorhina Bassii    | Bass's Australian Rose-Beetle.     |
| 4 | Callóodes Grayianus    | Dr. Gray's Calloodes.               | 9  | Lucanus Cervus        | Stag-Beetle.                       |
| 5 | Passalus interruptus   |                                     | 10 | Cladognathus Parryi   | Major Parry's Stag-Beetle.         |



Order. COLEOPTERA.



1 *Tillus mutillarius*

2 *Tachys minutu*

3 *Drilus flavescens* (male)

4 *Homaligus suturalis*

5 *Cheirotonus Macleayii* *Macleay's long armed Leaf-Beetle*

6 *Lampyrus noctiluca* *Glow-worm. Male.*

7 *Lampyrus noctiluca* *Glow-worm. Female.*

8 *Chrysochroa Edwardsii* *Edwards Buprestis*

9 *Rhipicera marginata* *Margined Fan-horned Beetle*

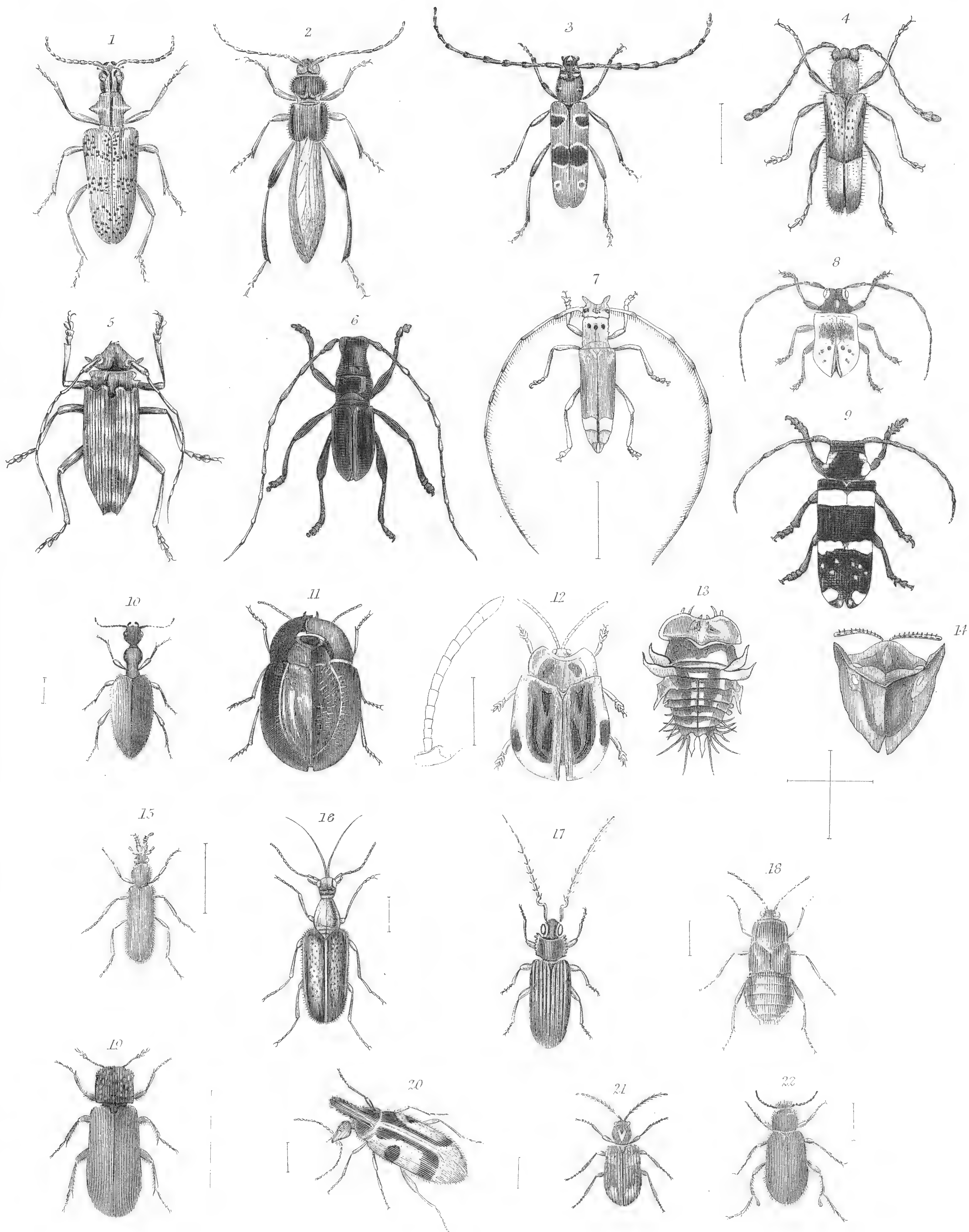
10 *Lamprocera Latreillii* *Latreille Glow-Worm*

11 *Oxyntopus Cumingii* *Philippine Island Great Click-Beetle*





Order COLEOPTERA.



- 1 *Rhagium mordax*
- 2 *Molophilus abbreviatus* Fly-like-beetle.
- 3 *Rosalia alpina* Alpine Musk-beetle.
- 4 *Telocera Wollastoni* Wollaston's Australian Long-horn
- 5 *Pascoea Idæ* Pascoe's armed-cheeked Beetle
- 6 *Pyrrha Wollastoni* Lord Howe's Island Pyrrha
- 7 *Phebe concinna* The elegant lavender coloured Long-horn.
- 8 *Anisocerus dulcissimus* Charming Yellow and Red Longhorn
- 9 *Tragocephala comitessa* The Countess Beetle
- 10 *Anthicus pedestris*

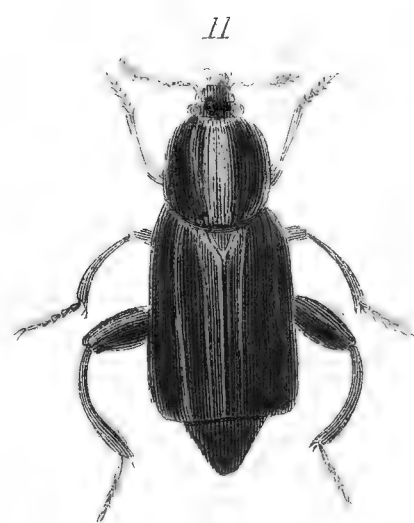
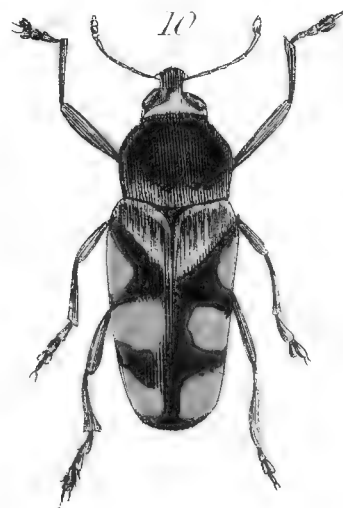
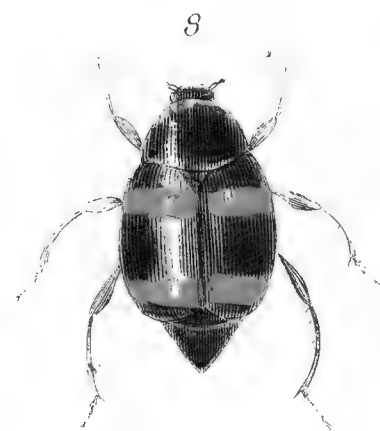
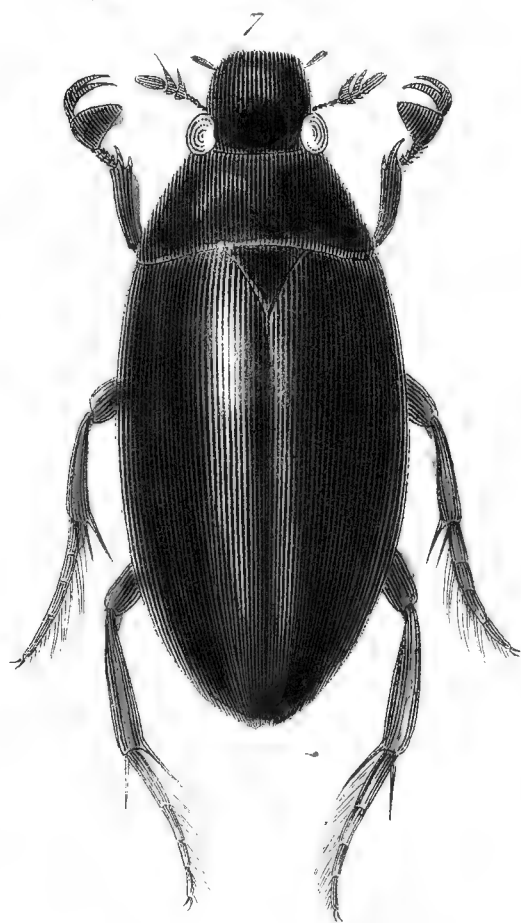
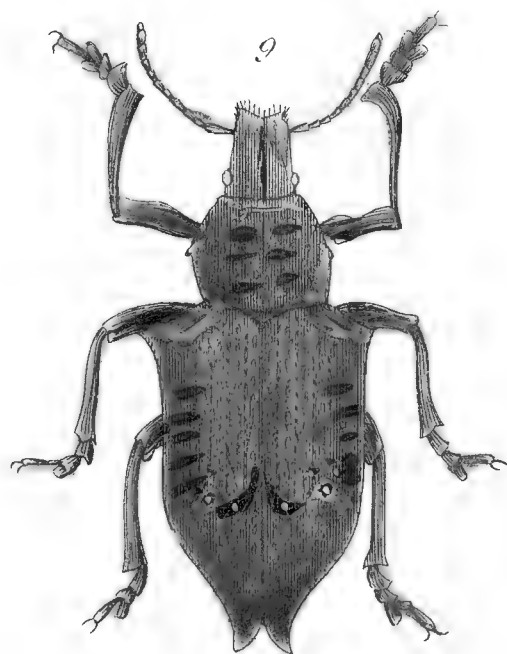
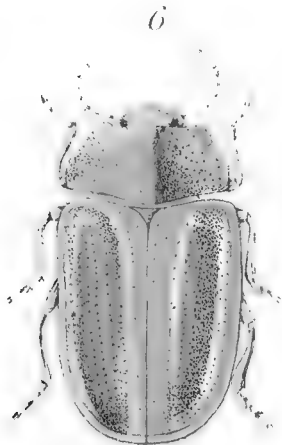
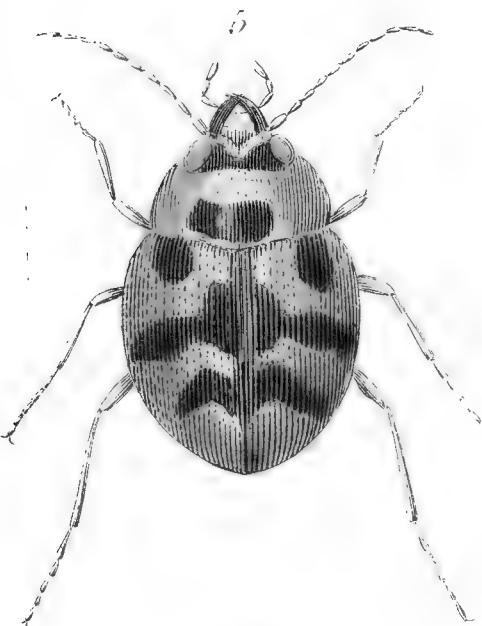
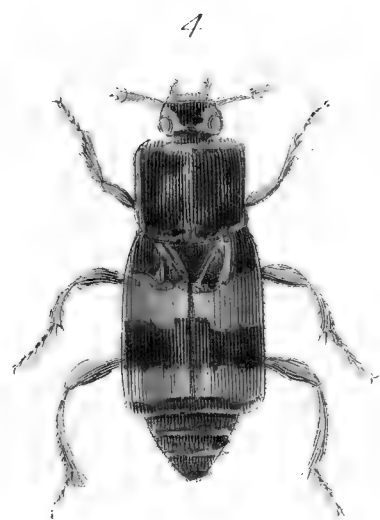
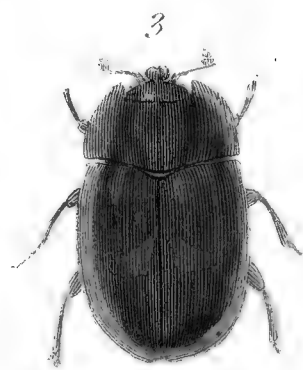
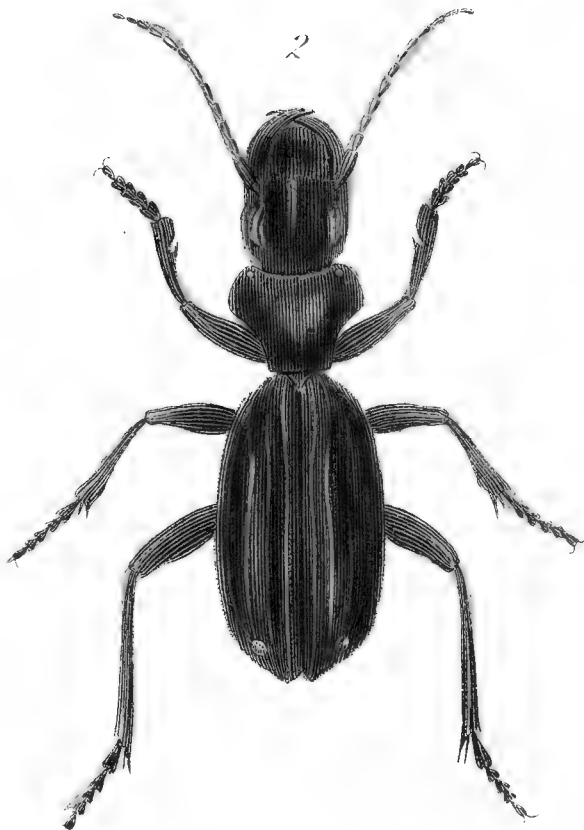
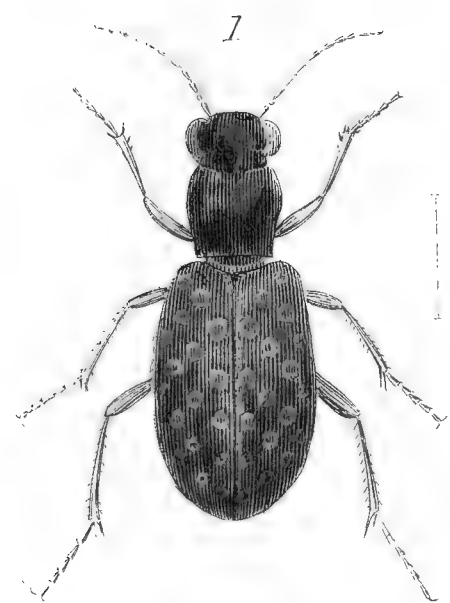
21 *Ptinus Fur*

- 11 *Helæus perforatus* The hairy perforated *Helæus*
- 12 *Prioptera Whitei* N. Chinese Tortoise-Beetle
- 13 Pupa of *Prioptera Whitei* from Shang-hai
- 14 *Selenis spinifex* Perforated Tortoise-Beetle
- 15 *Cerocoma Schafferi*
- 16 *Gnathium Francilloni* Francillon's Thread-jaw
- 17 *Brontes planatus*
- 18 *Lomechusa dentata* Ants-nest-beetle.
- 19 *Apate capucina*.
- 20 *Notoxus monoceros*

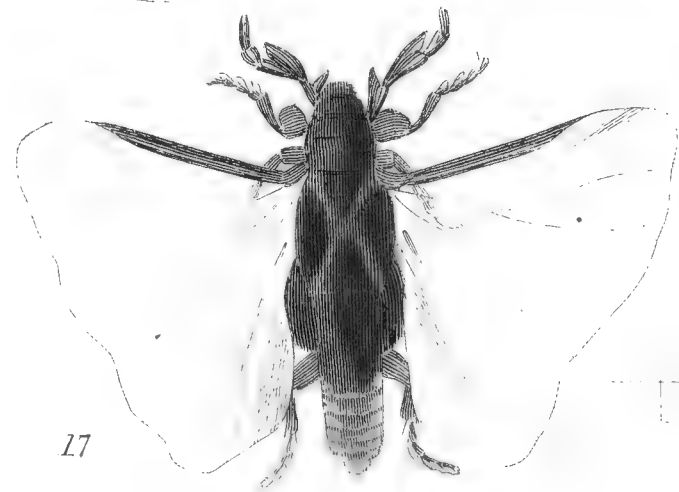
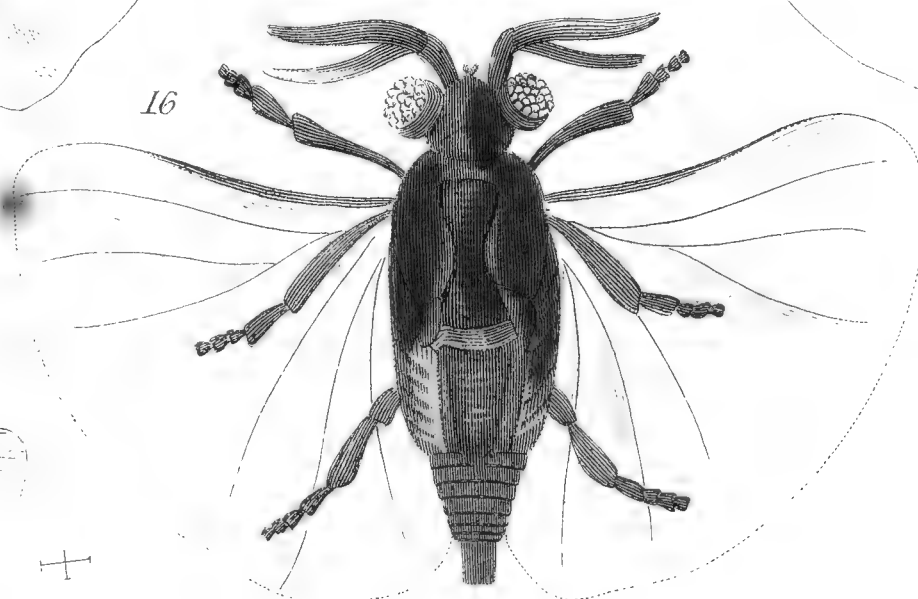
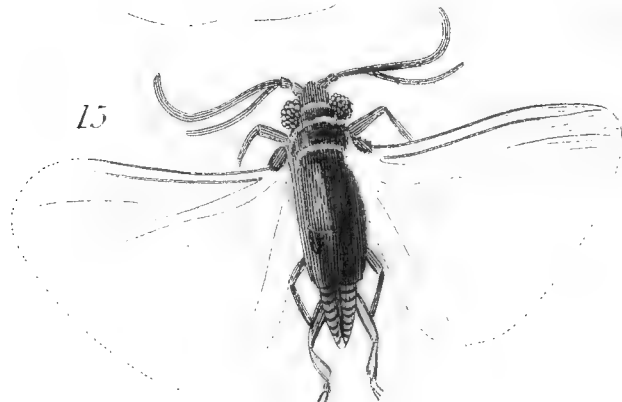
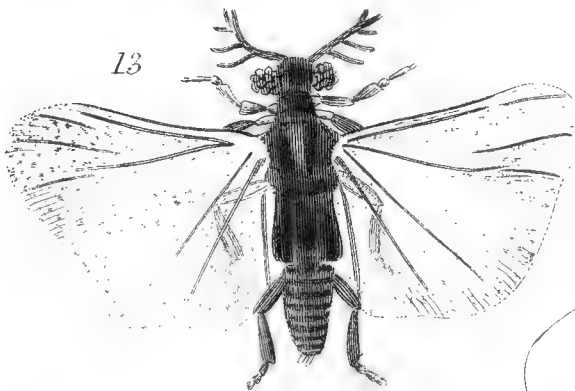
22 *Dasytes niger*



Order COLEOPTERA.



Order STREPSIPTERA



1 *Elaphrus uliginosus*

2 *Anthia 4 guttata*

3 *Nitidula grisea*

4 *Necrophorus vespillo* Burying beetle

5 *Omophron limbatum*

6 *Australica curtisi*

7 *Hydrous piceus* Large Water-beetle.

8 *Scaphidium amaculatum*

9 *Cyphus hancocki* Capt<sup>n</sup> Hancock's Green & Gold Weevil

10 *Ameris dufresnii* Dufresne's Red spotted Weevil

11 *Necrodes littoralis*

Shore-burying-Beetle.

12 *Stylops kirbyi*

13 *Halictophagus curtisi*

14 *Stylops melitta*

15 *Elenchus walkeri*

16 *Xenos vesparum*

17 *Stylops dalii*





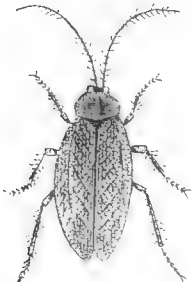
Order. ORTHOPTERA.

1



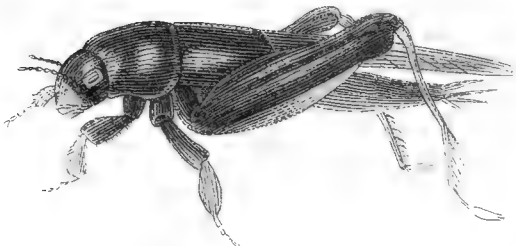
*Forficula auricularia.*  
Earwig.

2



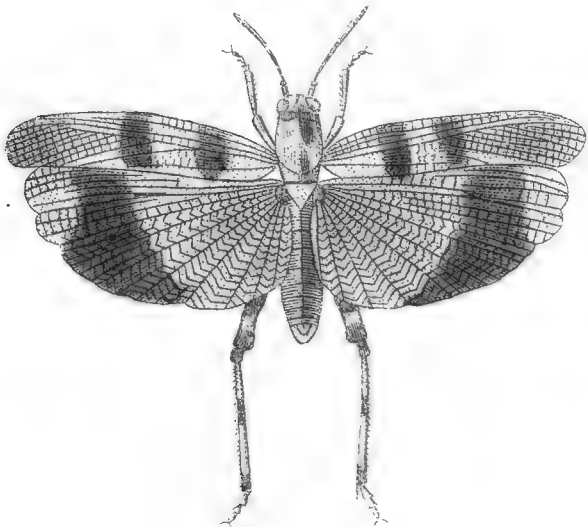
*Blatta lapponica*  
Lapland Cockroach

3



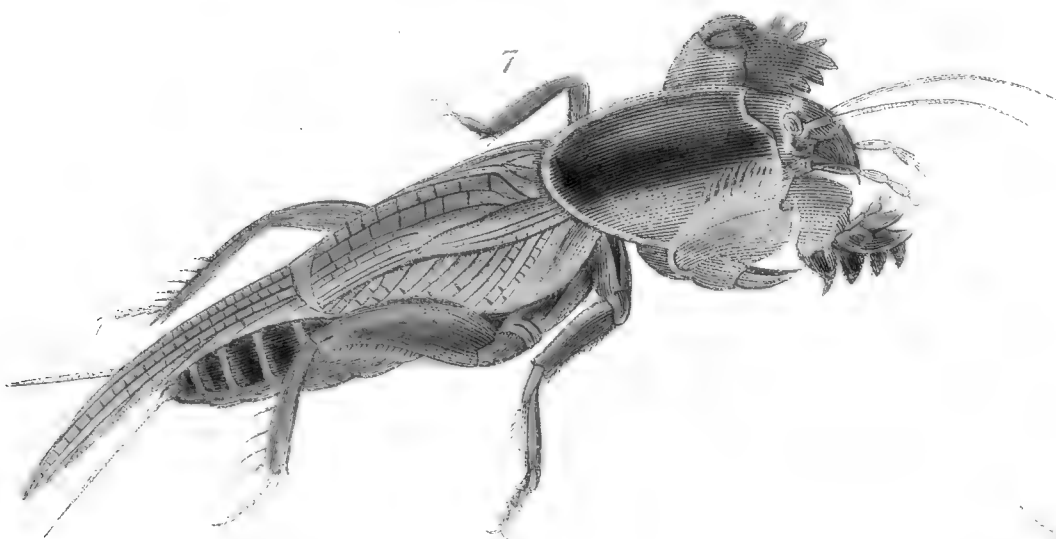
*Tridactylus parvulus*

6



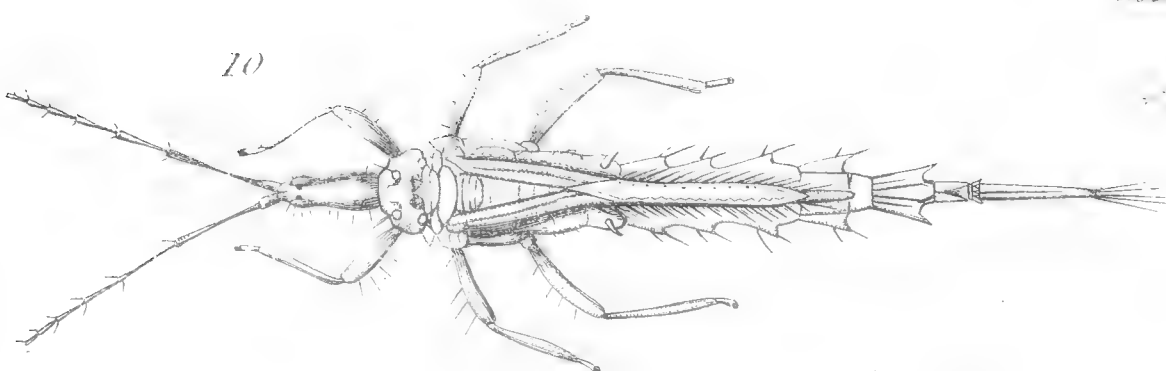
*Acrydium canilucens.*  
Blue-winged Grasshopper.

7



*Gryllotalpa vulgaris.*  
Mole-cricket.

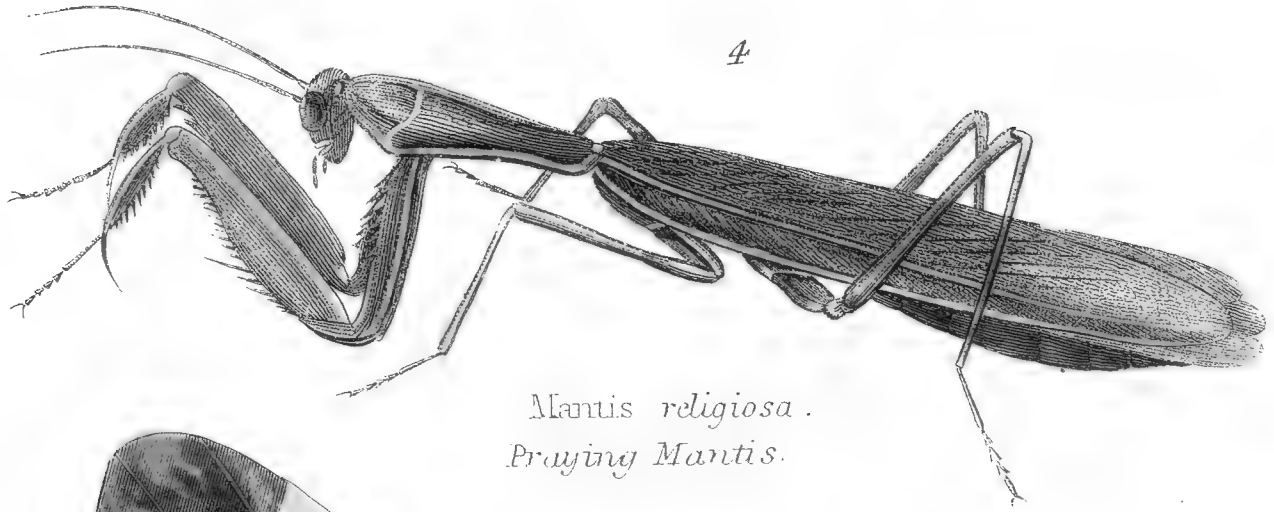
10



Order  
THYSANOPTERA

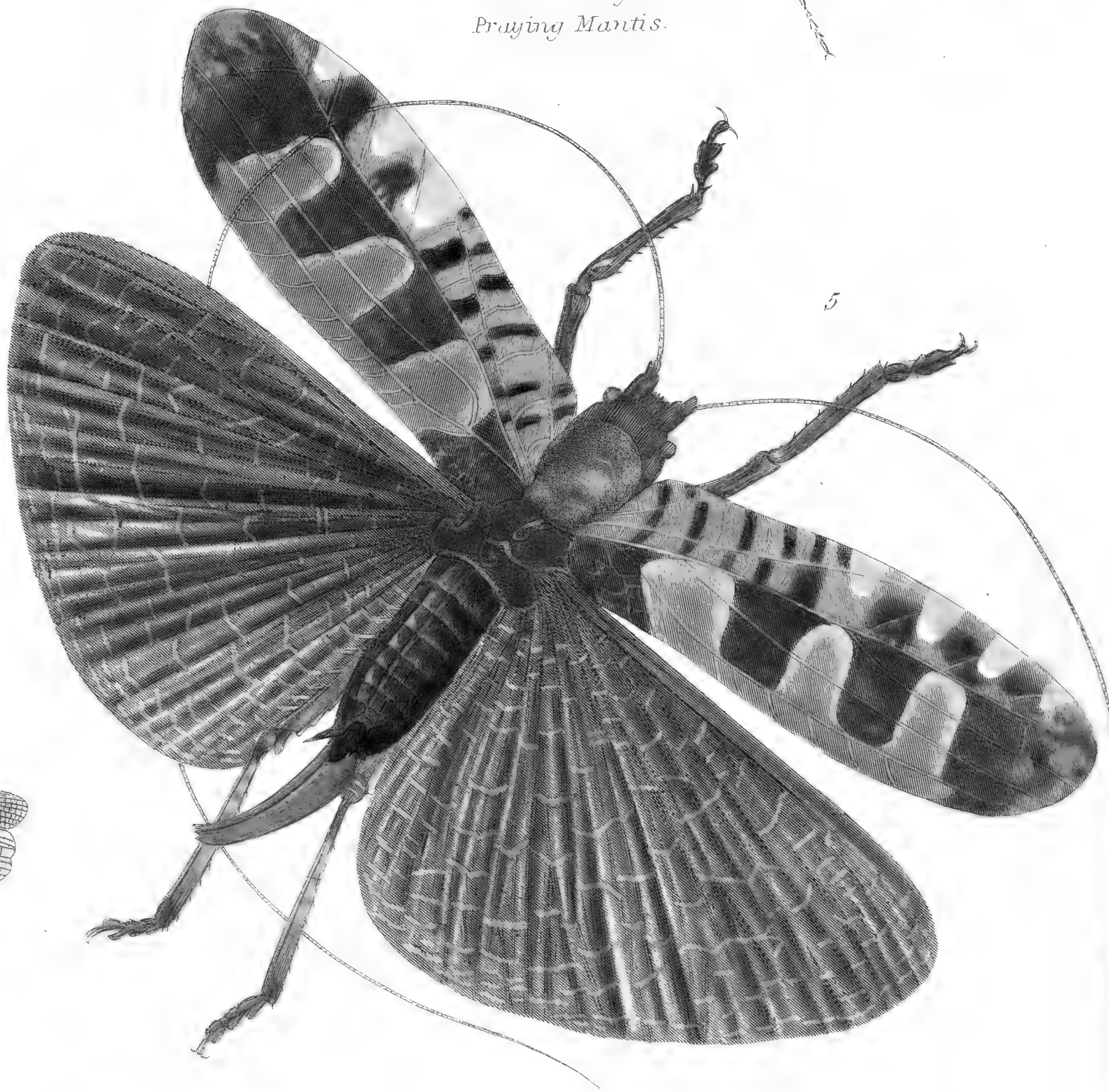
*Idolothrips spectrum.*  
(highly magnified)

4



*Mantis religiosa.*  
Praying Mantis.

5



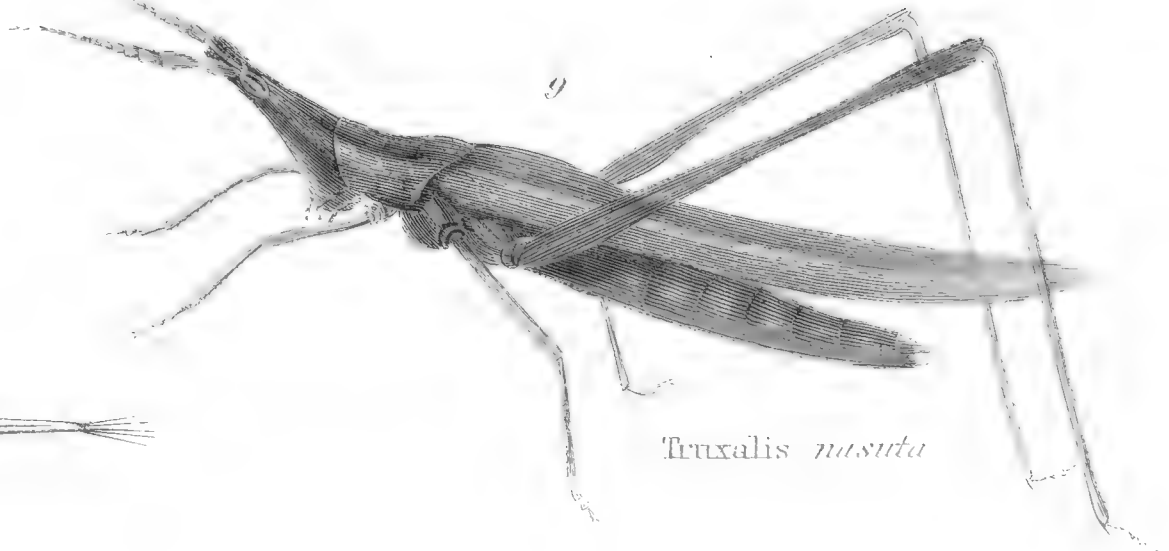
*Acanthodis imperialis* — The Emperor black and green Cricket

8



*Acrydium bipunctatum*

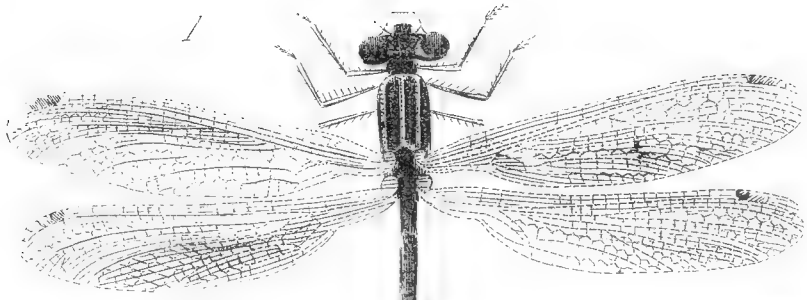
9



*Truxalis nasuta*



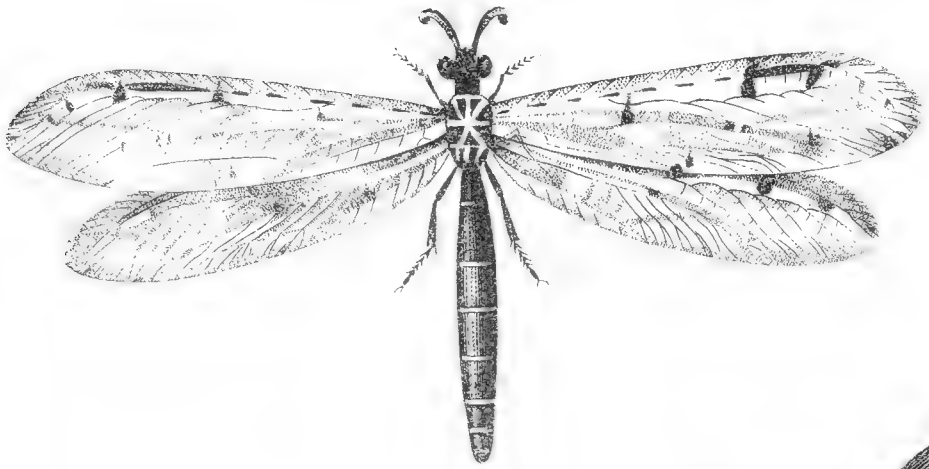
Order NEUROPTERA.



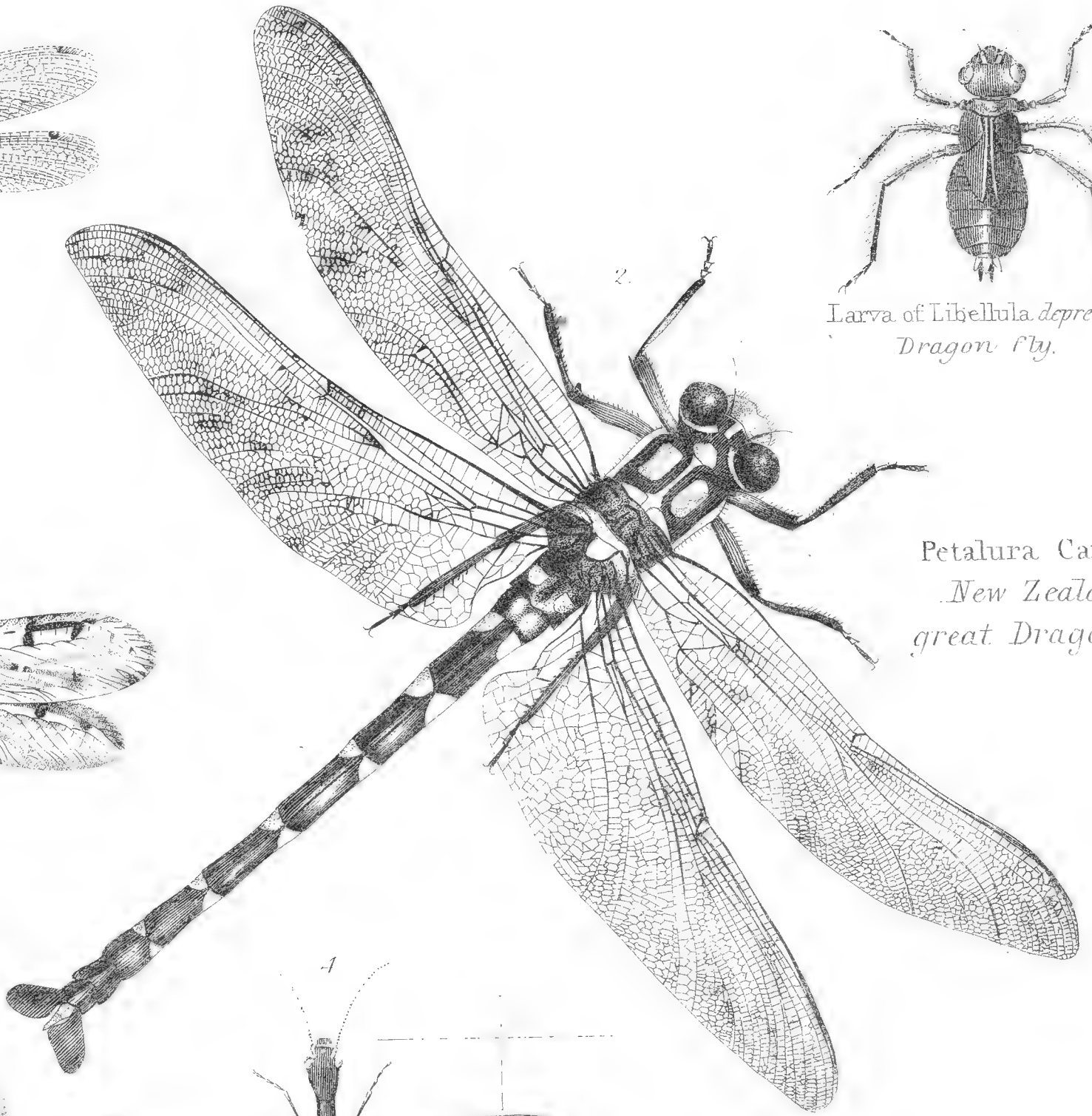
*Lestes sponsa*

*Small Dragon-fly.*

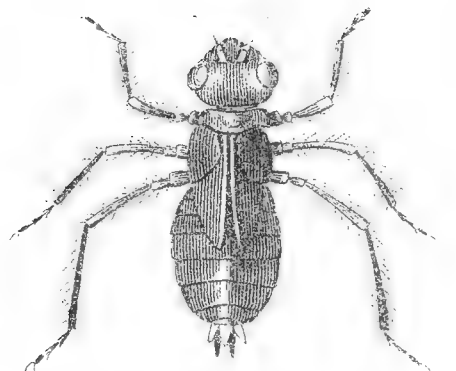
5



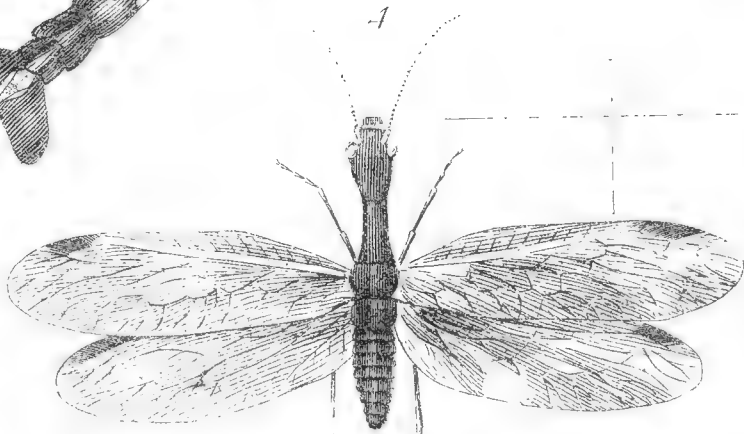
*Myrmeleo formicarius.*  
*Ant-lion.*



*Petalura Carrovei*  
*New Zealand*  
*great Dragonfly*



*Larva of Libellula depressa.*  
*Dragon Fly.*



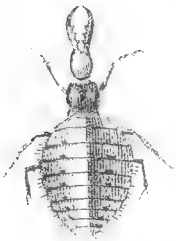
*Raphidia notata*  
*Snake-fly.*



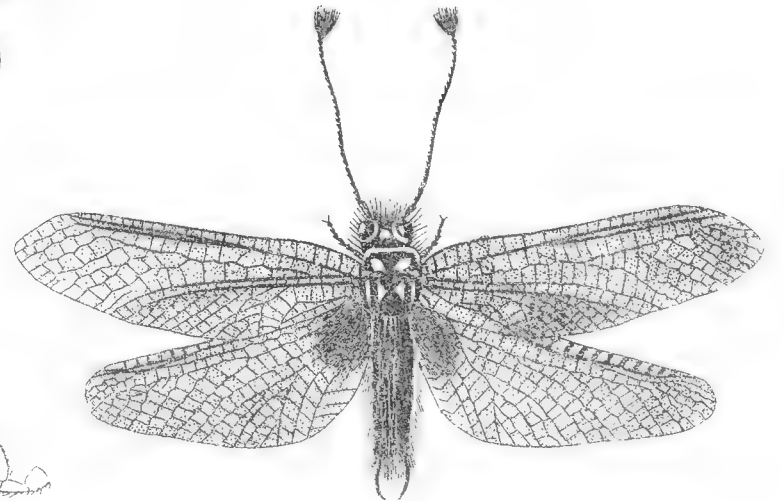
5 h



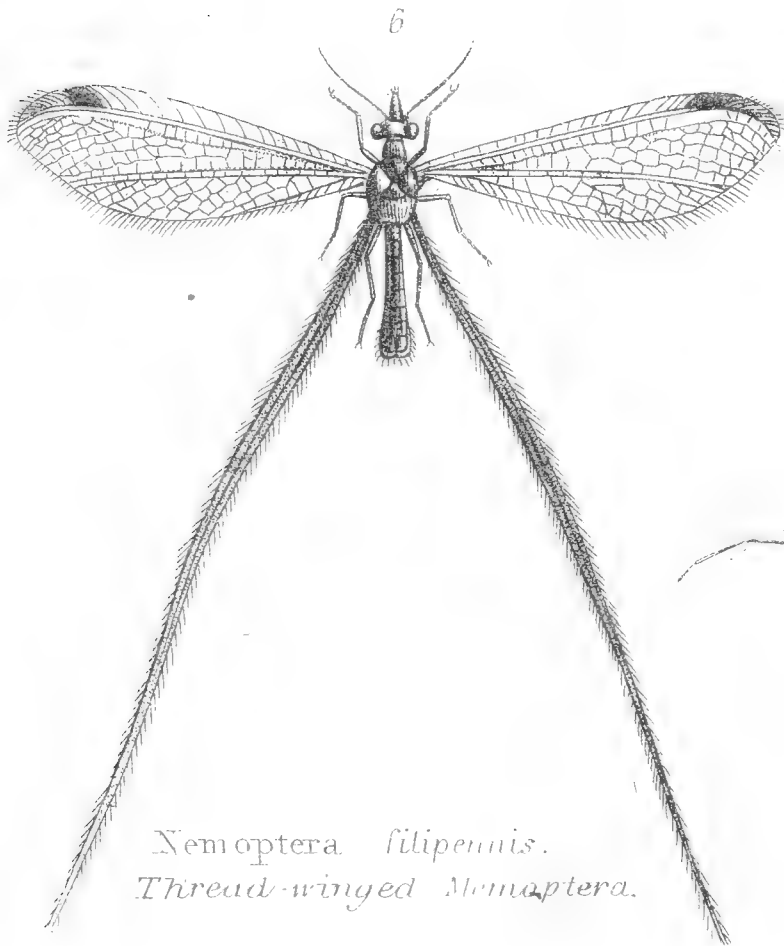
5 c



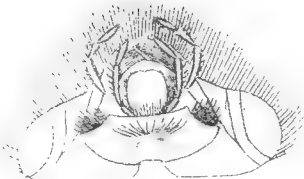
*5 a*  
*larva*



*Ascalaphus barbarus.*



*Nemoptera filipennis.*  
*Thread-winged Nemoptera.*



8 a



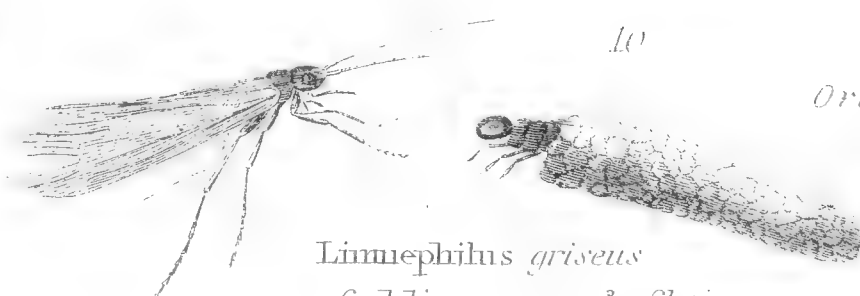
8 b



*Ephemera vulgata*  
*May-fly.*



*Pimorpa communis*  
*Scorpion-fly.*



*Limnephilus griseus*  
*Caddis-worm & fly.*

Order TRICHOPTERA.

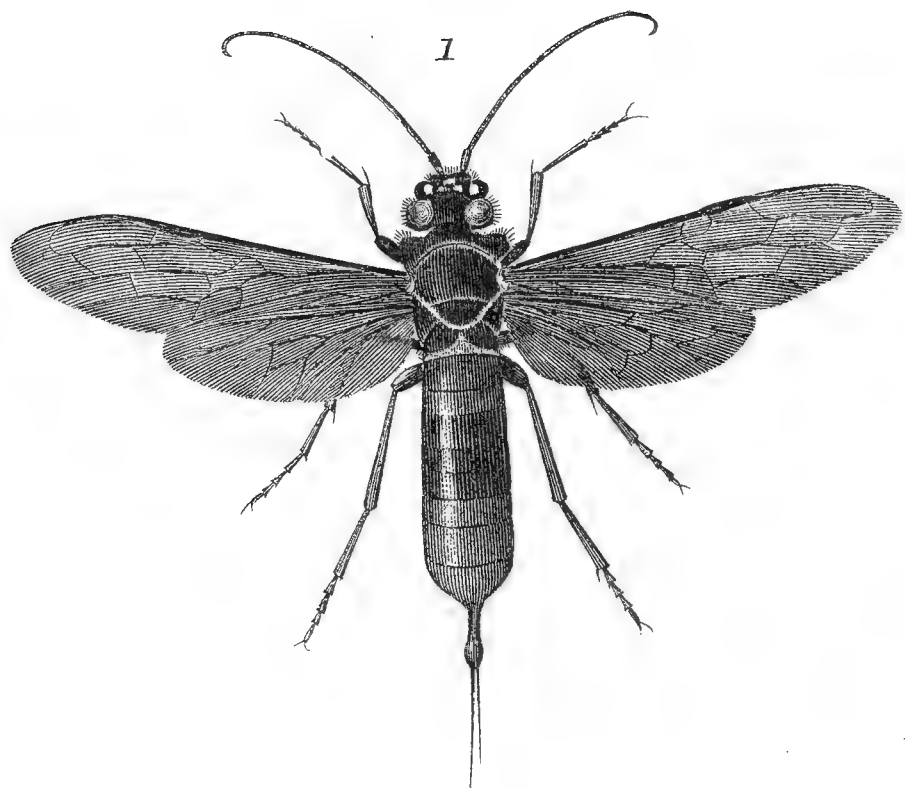




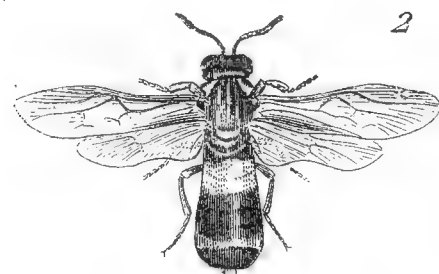
# ENTOMOLOGY.

PLATE 7

Order HYMENOPTERA.



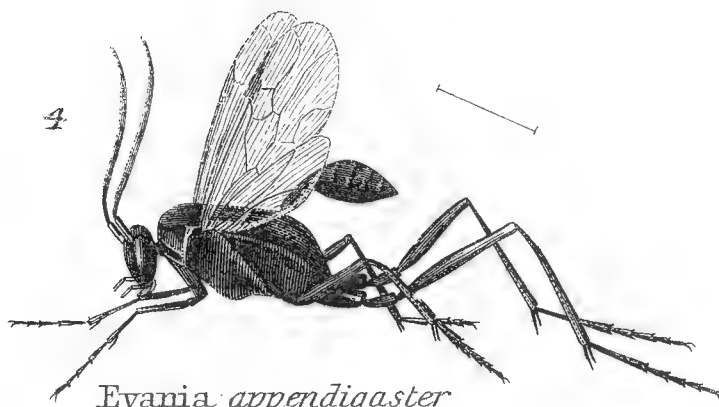
*Sirex gigas.*  
Tailed Wood-Wasp.



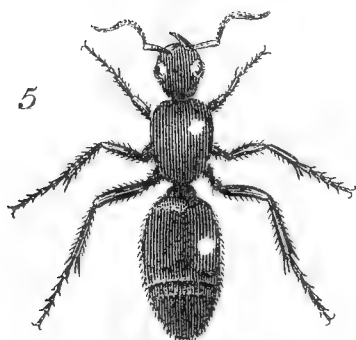
*Pterygophorus cinctus*  
Australian Saw-fly.



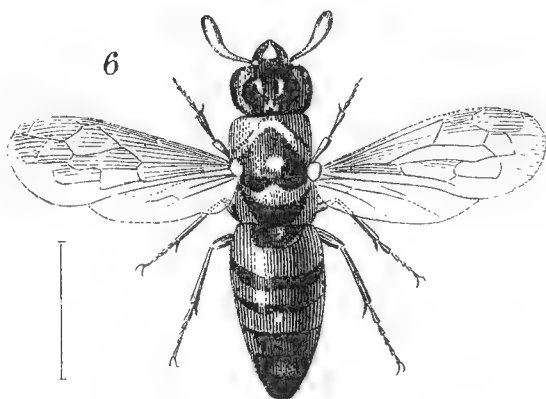
*Banchus pictus*  
Painted Ichneumon.



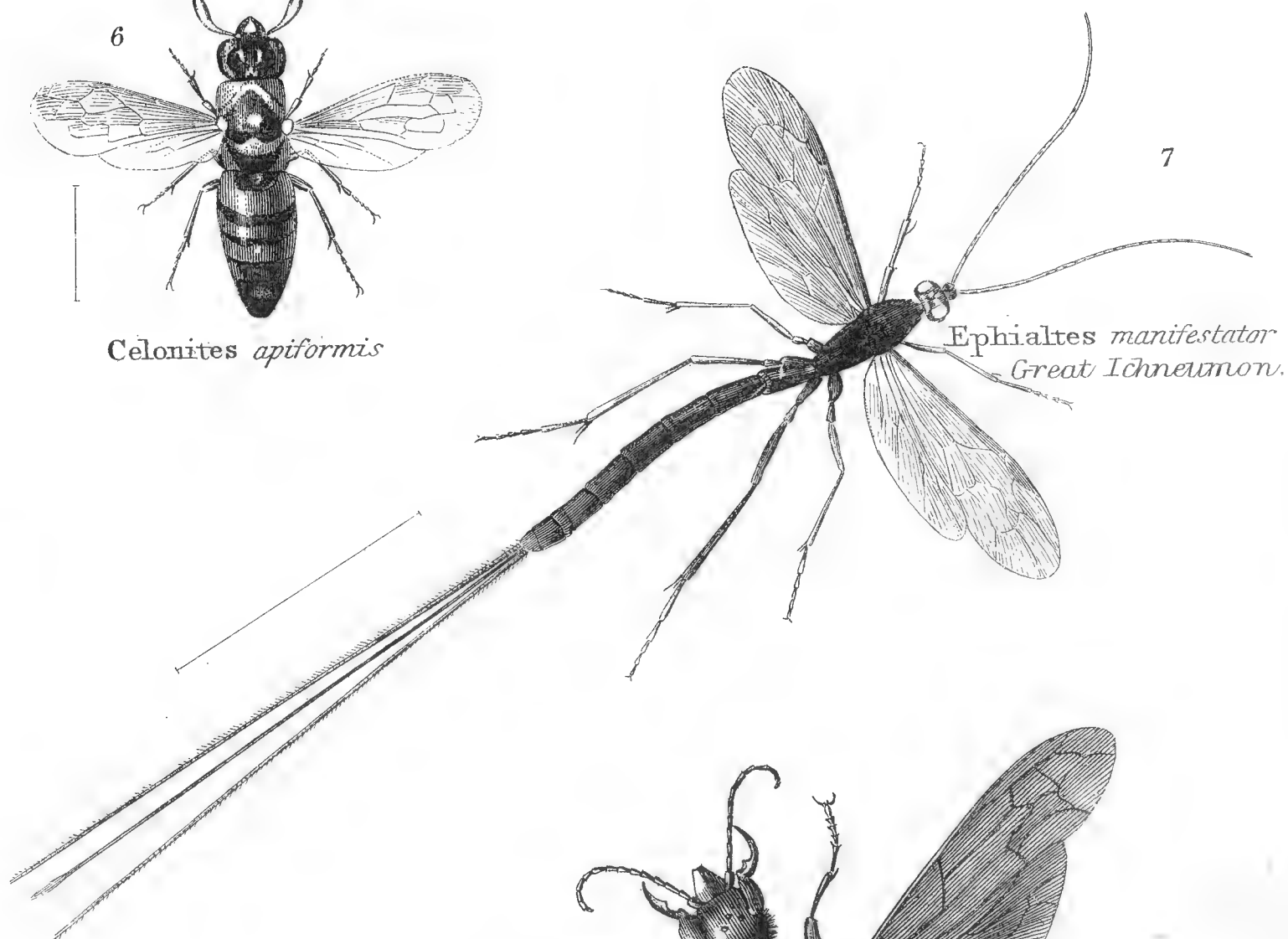
*Evania appendigaster*  
Cockroach fly.



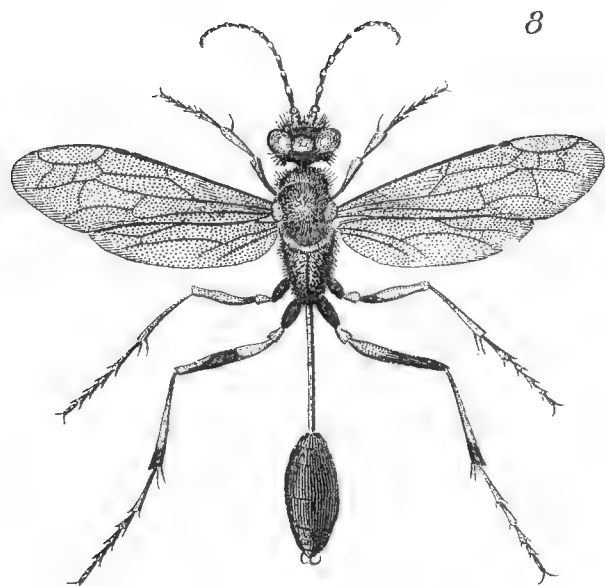
*Mutilla coxinea*



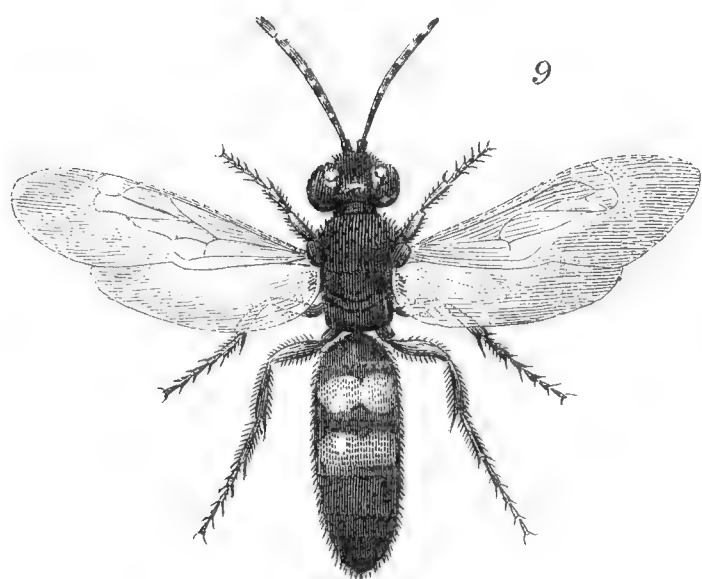
*Celonites apiformis*



*Ephialtes manifestator*  
Great Ichneumon.



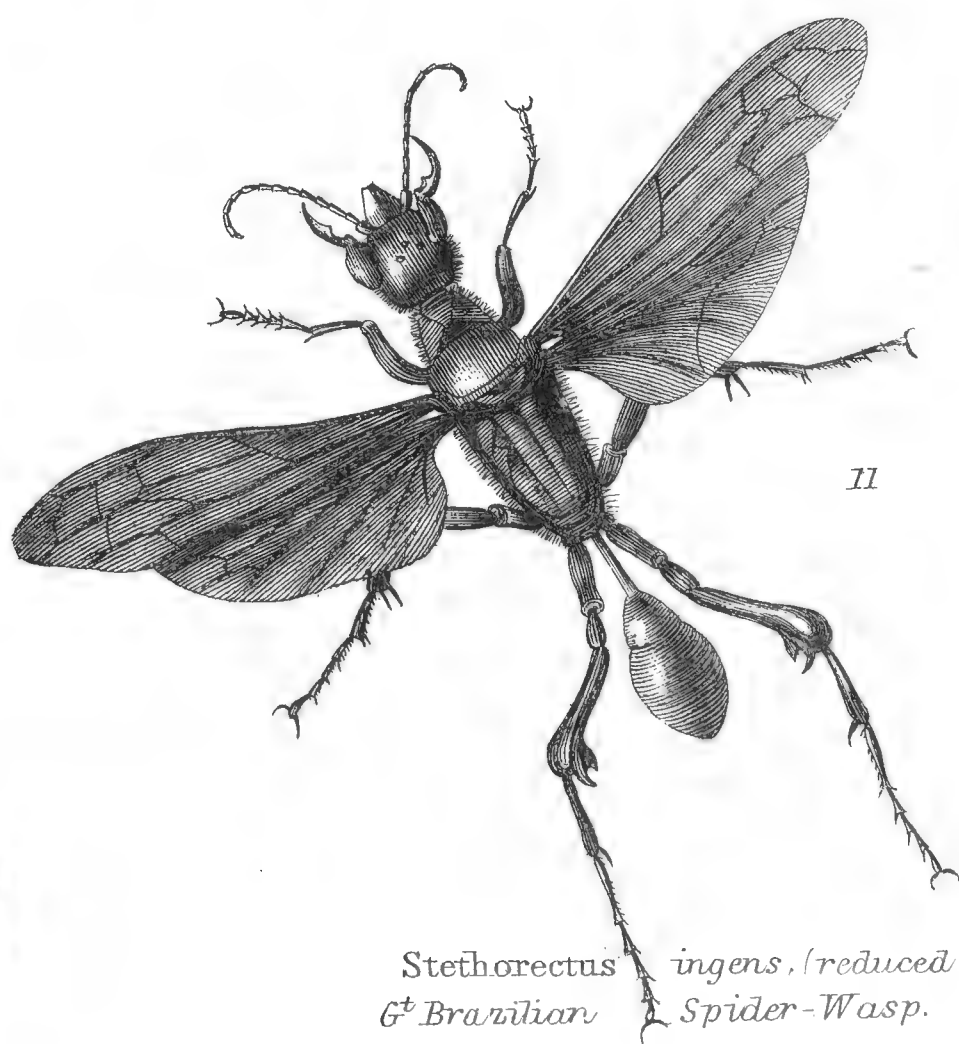
*Pelopæus spirifer*



*Scolia 4-maculata*



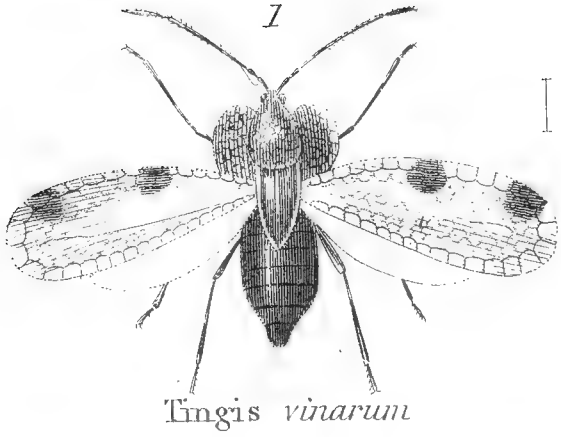
Head of *Philanthus triangulum*



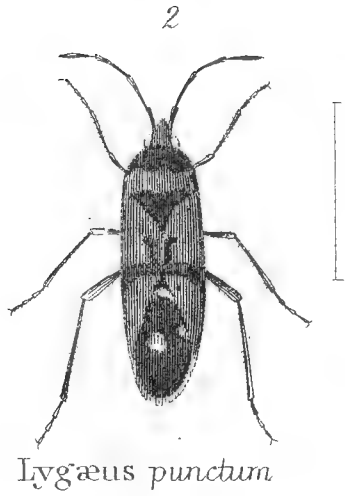
*Stethorectus ingens*, (reduced)  
G<sup>t</sup> Brazilian Spider-Wasp.



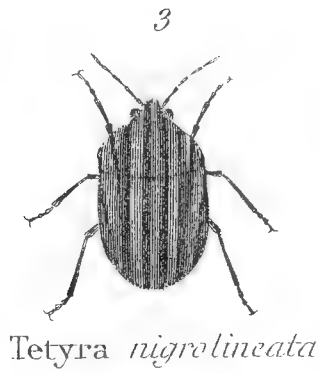
Order HEMIPTERA



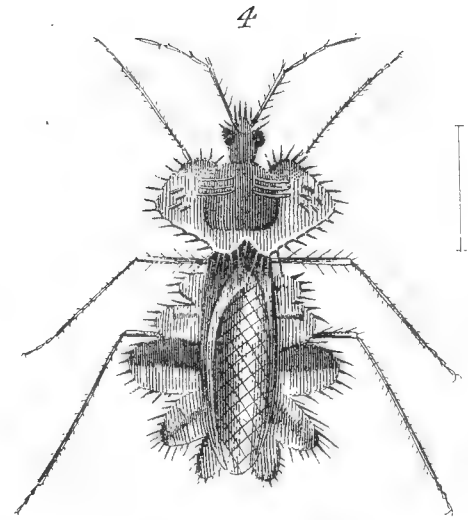
*Tingis vinarum*



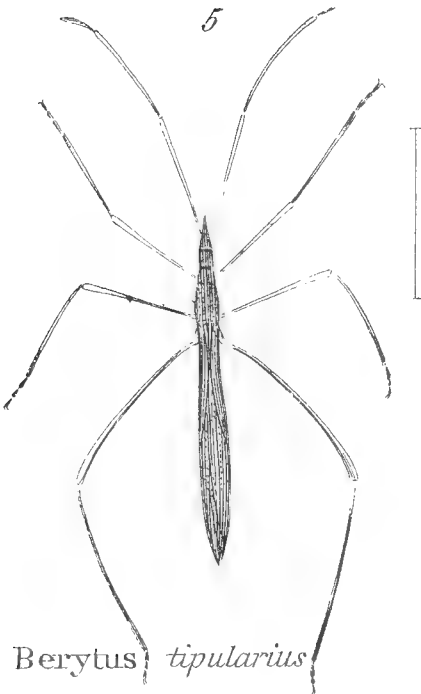
*Lygaeus punctum*



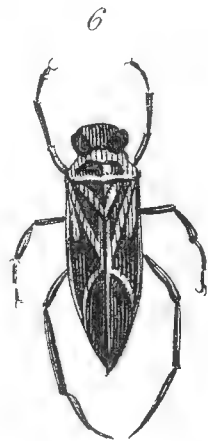
*Tetyra nigrolineata*



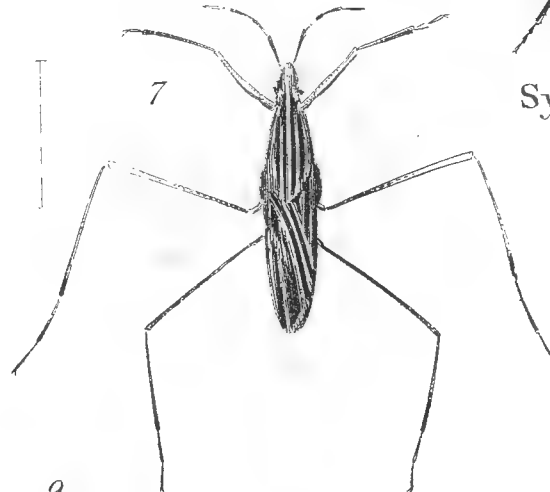
*Syromastes paradoxus*



*Berytus tipularius*



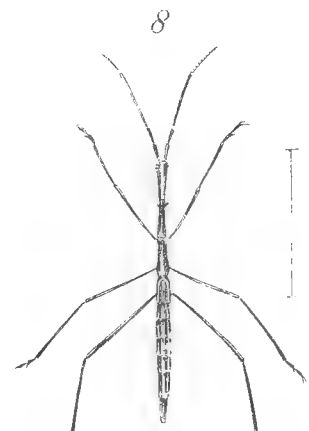
*Notonecta glauca*  
Water boatman.



*Gerris lacustris*  
Water-runner.



*Naucoris cimicoides*

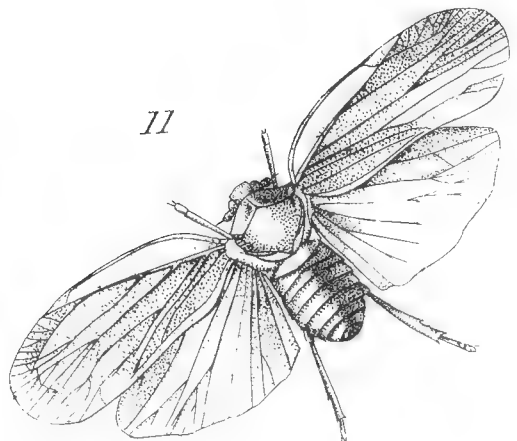


*Hydrometra staghorum*

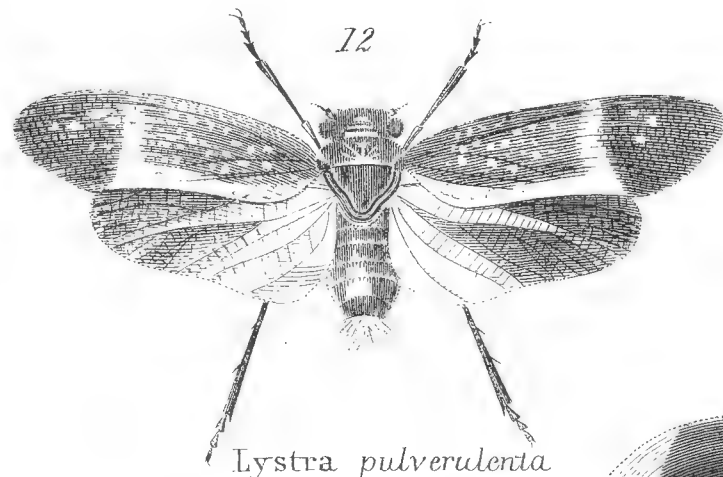
Order HOMOPTERA



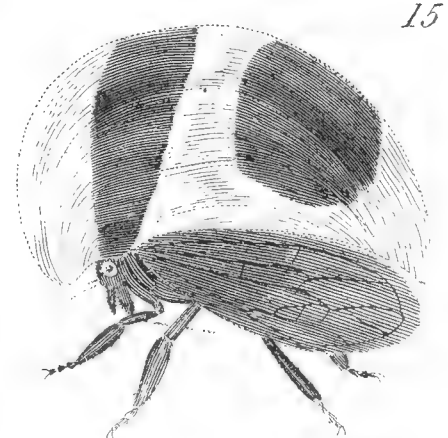
*Ancyra appendiculata*



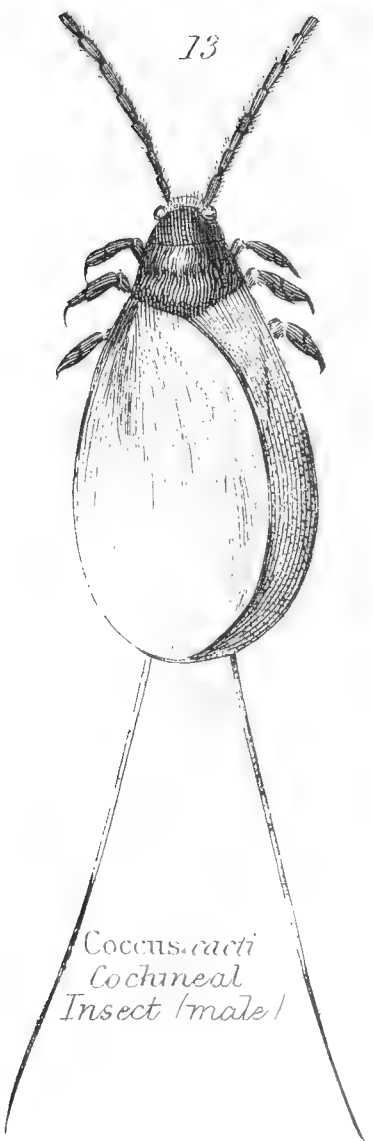
*Achilus flammeus*



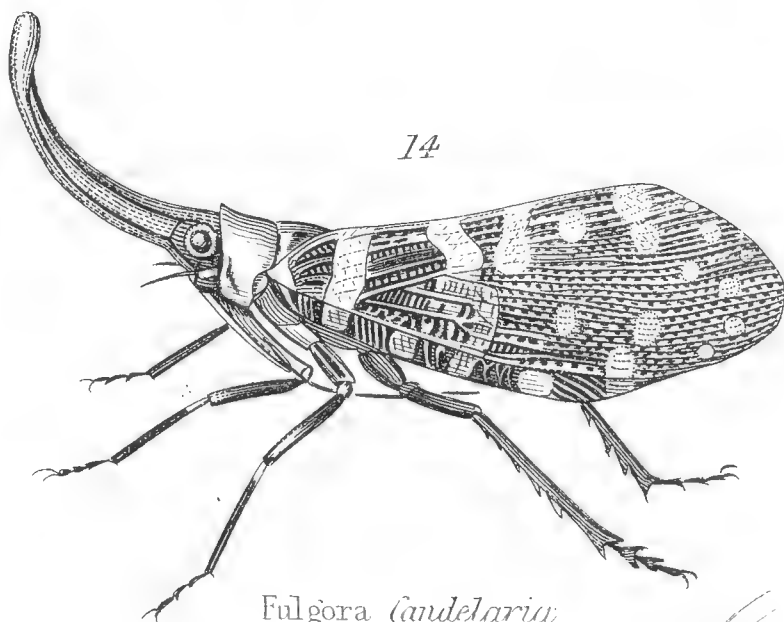
*Lystra pulverulenta*



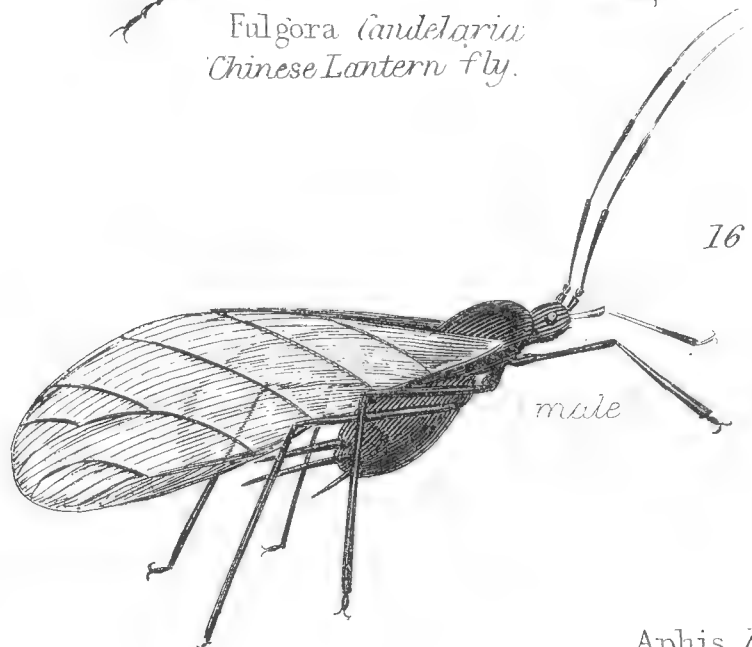
*Membracis foliaceus*



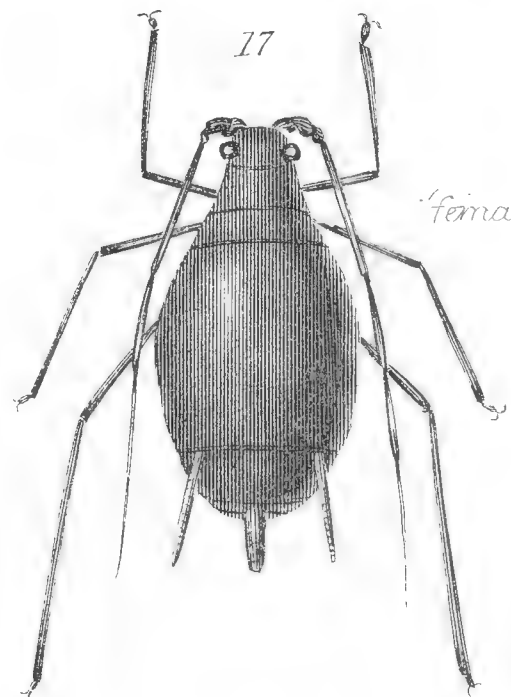
*Coccus cacti*  
Cochineal  
Insect (male)



*Fulgora candelaria*  
Chinese Lantern fly.



male



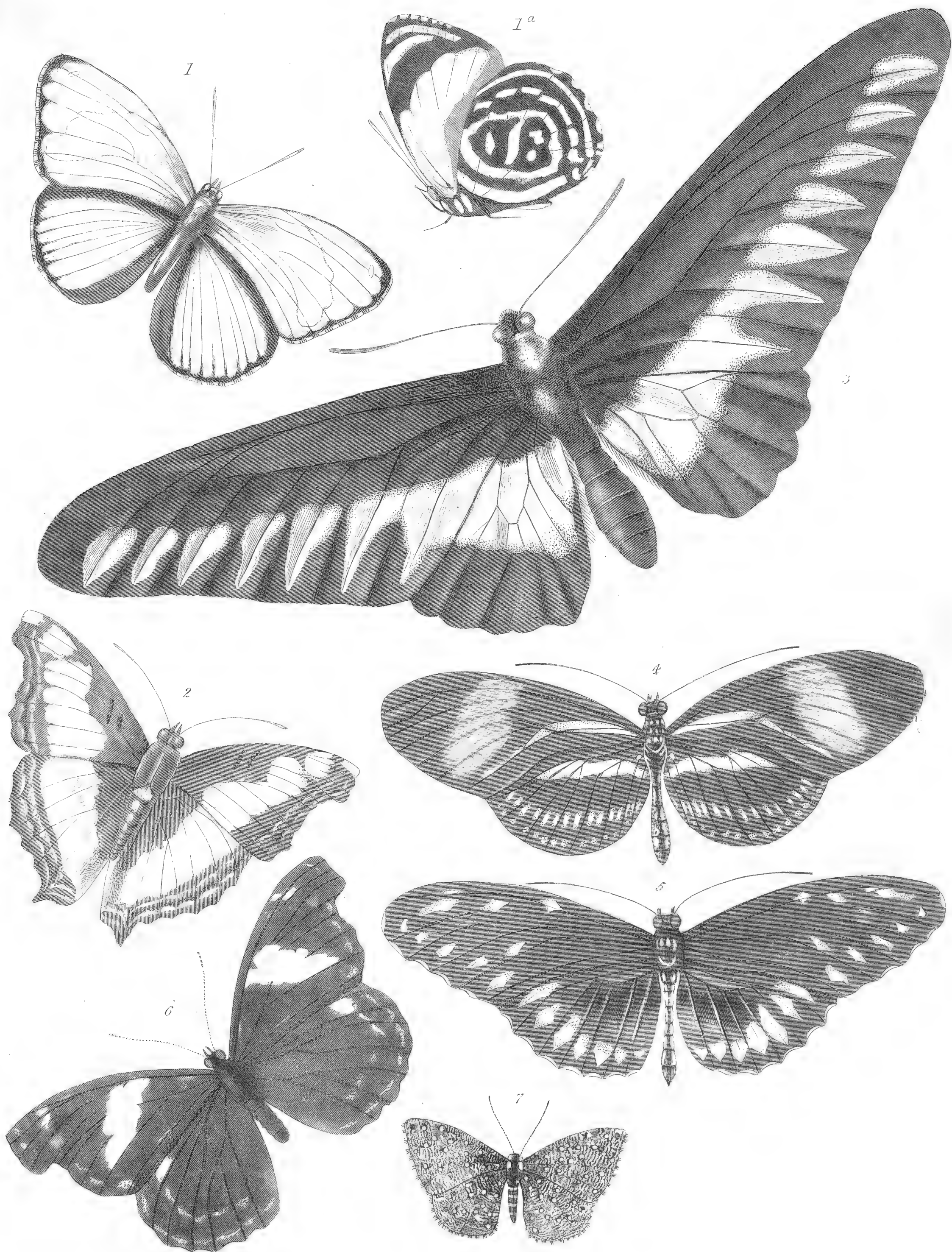
female

*Aphis Rosa* Plant lice of the Rose.





Order LEPIDOPTERA.



1 Catagramma excelsior—Hewitson's Amazon Butterfly.

1a ————— under side.

2 Apatura Laura — Drury's Emperor Butterfly.

3 Ornithoptera Brookeana—Brooke's Borneo Butterfly (male)

4 Heliconia Hermathena.

5 Heliconia Hecalesia.

6 Epicalia Penthia.

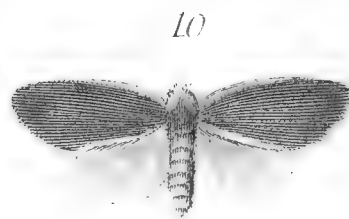
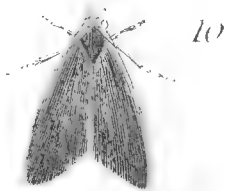
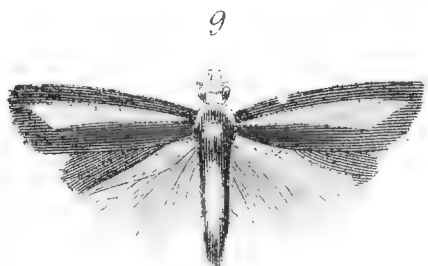
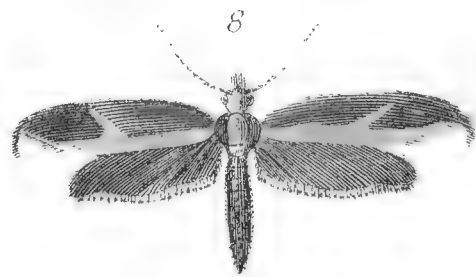
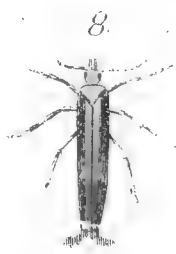
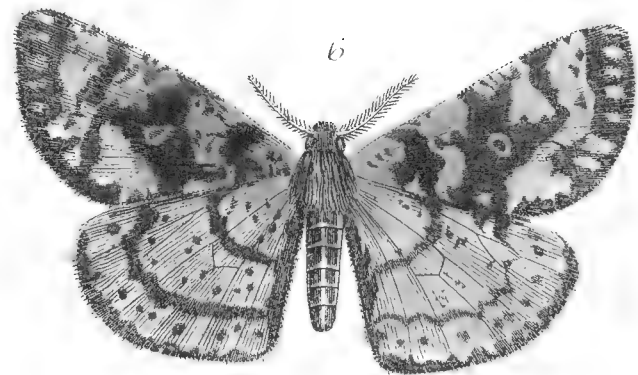
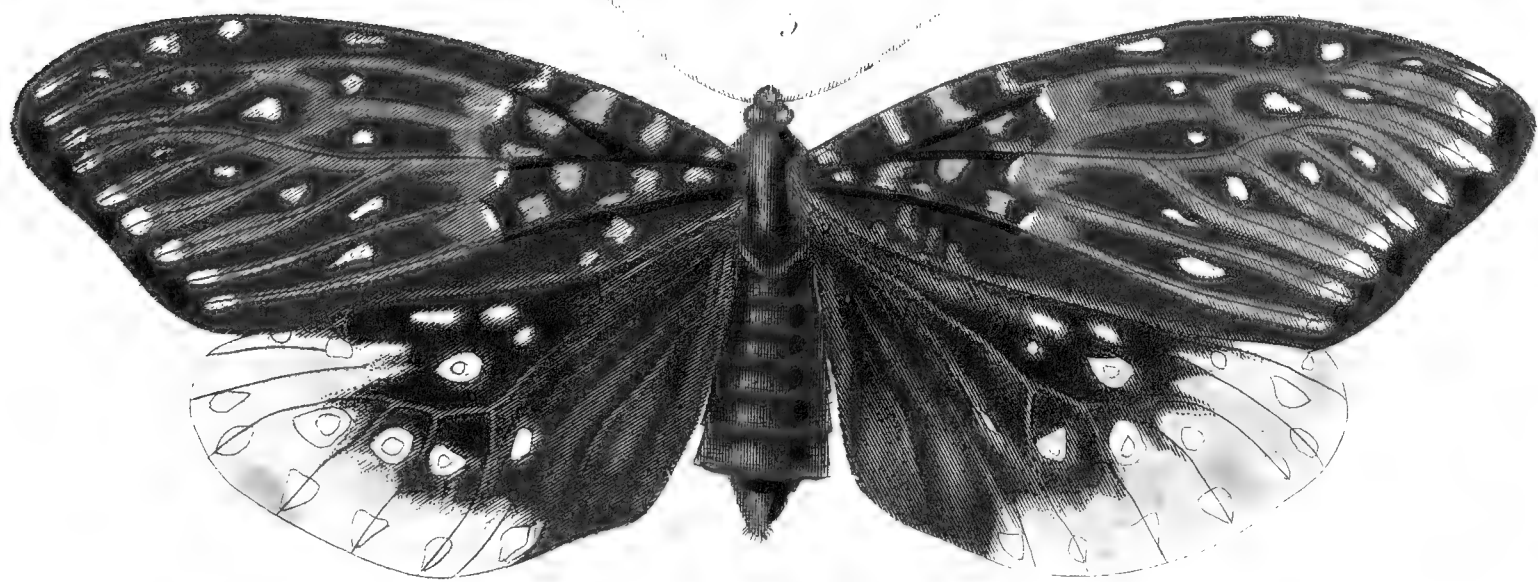
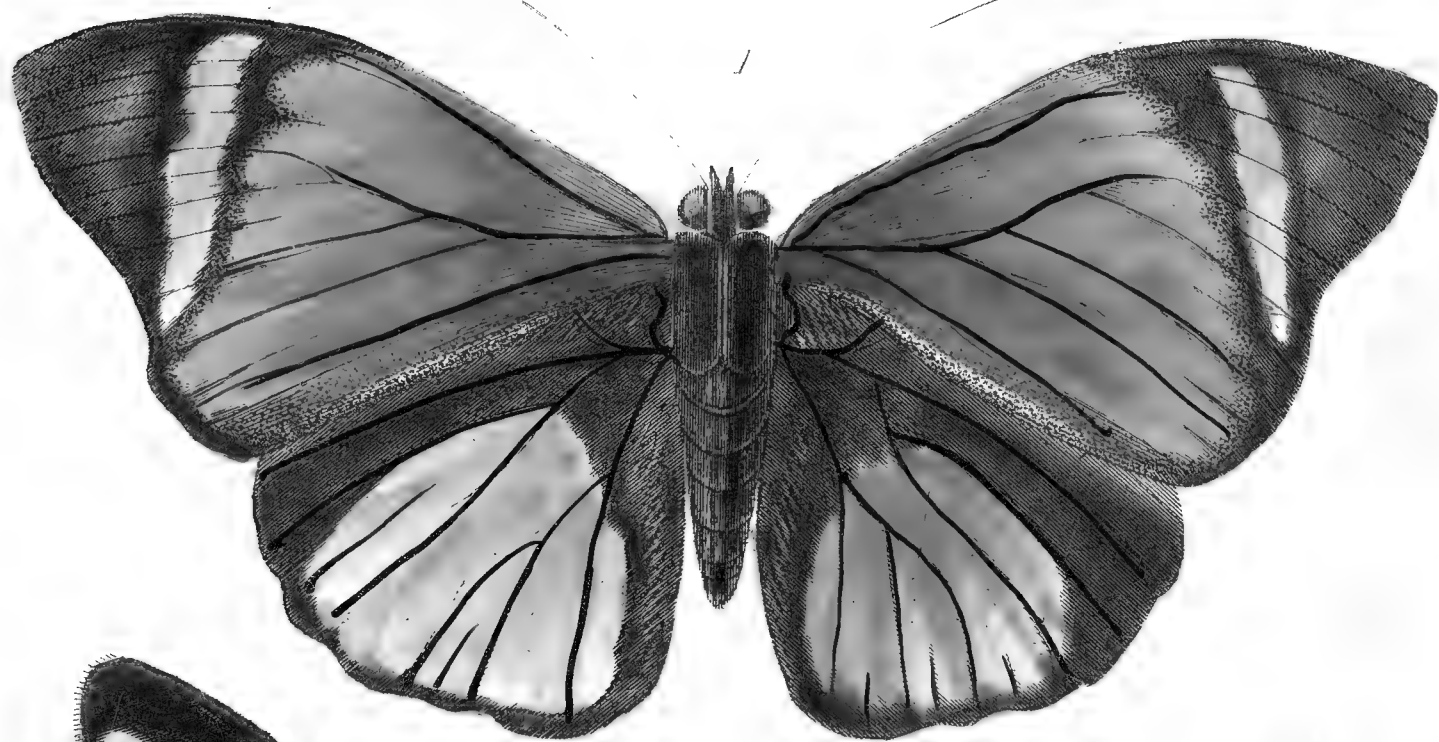
7 Calydna Calamisa.





# ENTOMOLOGY.

Order LEPIDOPTERA.



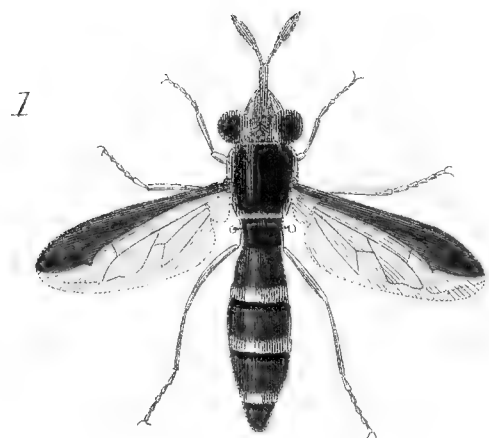
- 1 *Agrias Claudia* — *The Anuctta Amazon Butterfly* male  
 2 *Drusilla Mylæcha* — *Macgillivray's Louisiade*  
 3 *Præsos Mariana* — *Marian White's Moth*  
 4 *Erasmia pulchella* — *Charles Horne's Moth*  
*anguiflua* — *The Painter's pallet*

- 6 *Fidonia atomaria*  
 7 *Adela Sultzella*  
 8 *Cerostoma xylostella*  
 9 *Crambus margaritellus*  
 10 *Faris clorana*

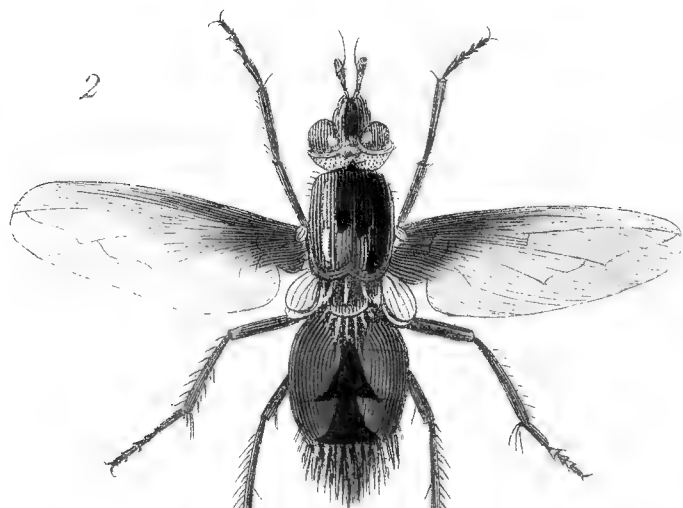




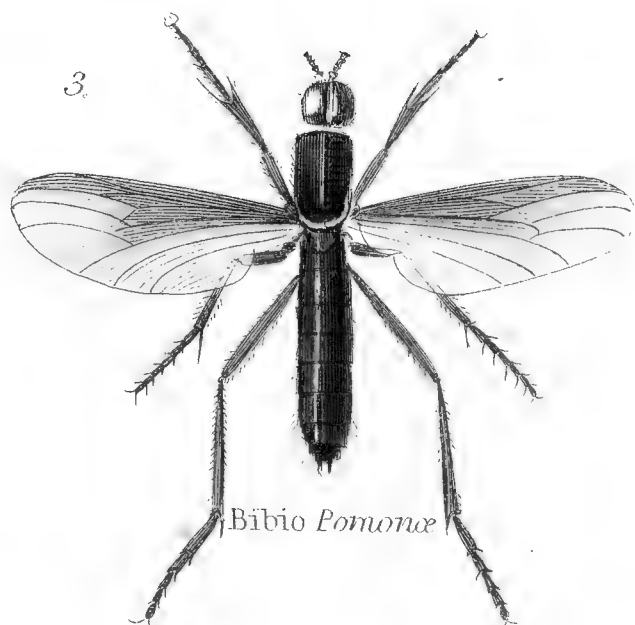
Order, DIPTERA.



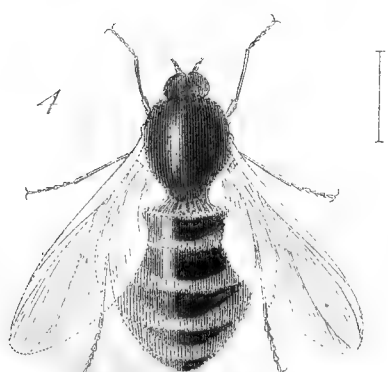
*Ceria conopsoidea*



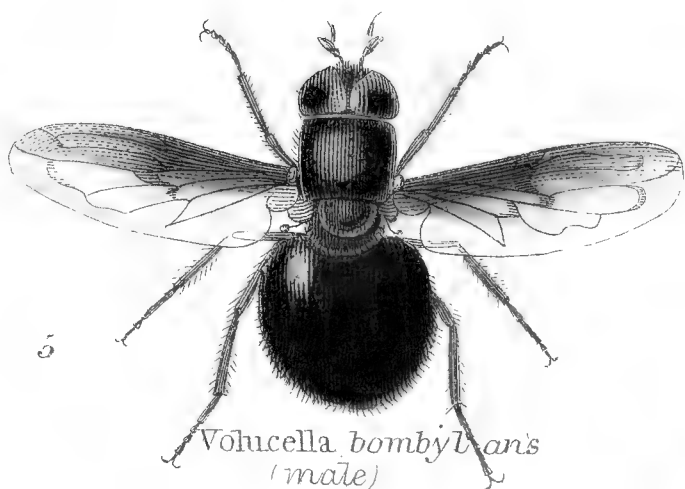
*Echinomyia ferd*



*Bibio Pomona*



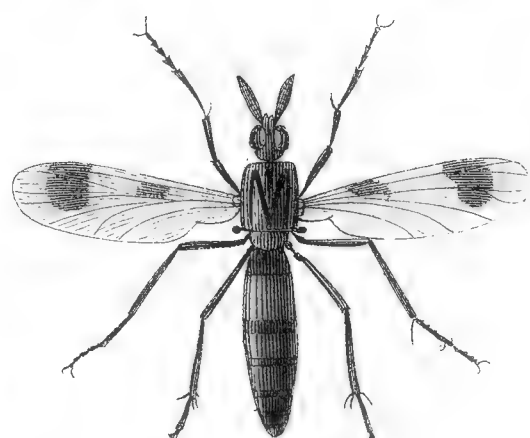
*Henops marginatus*



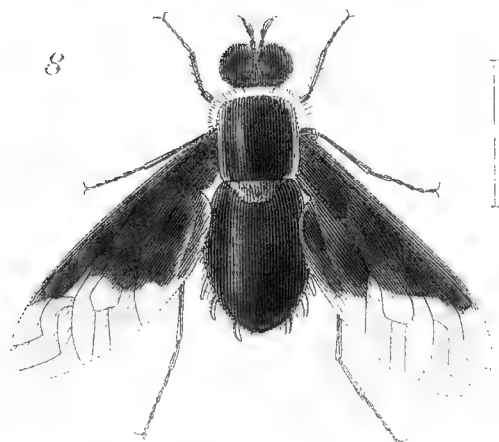
*Volucella bombylians*  
(male)



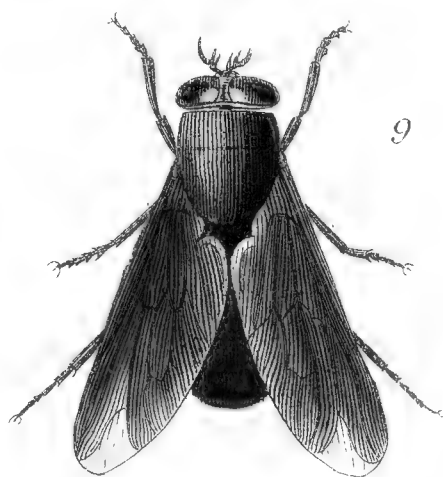
*Diopsis Ichneumonaea*  
Telescope fly



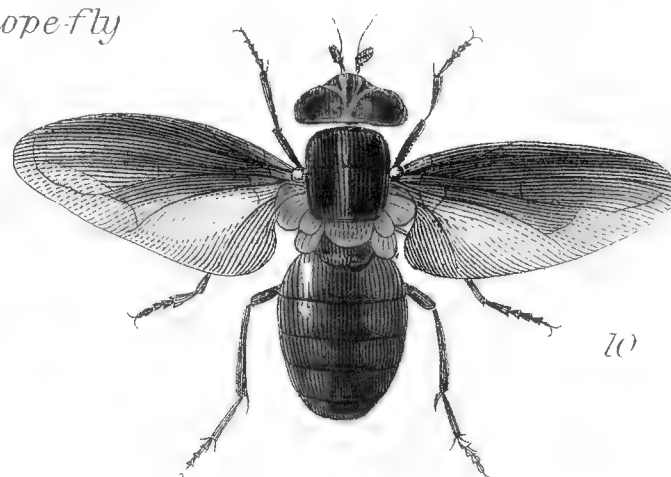
*Ceroplatus tipuloides*



*Anthrax Morio*

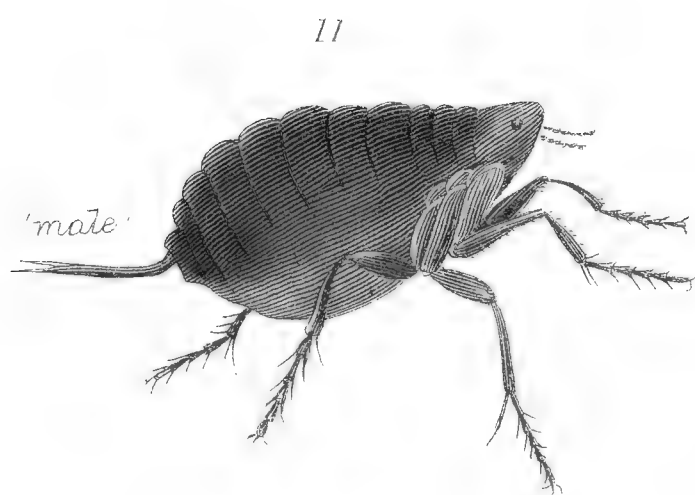


*Tabanus niger*

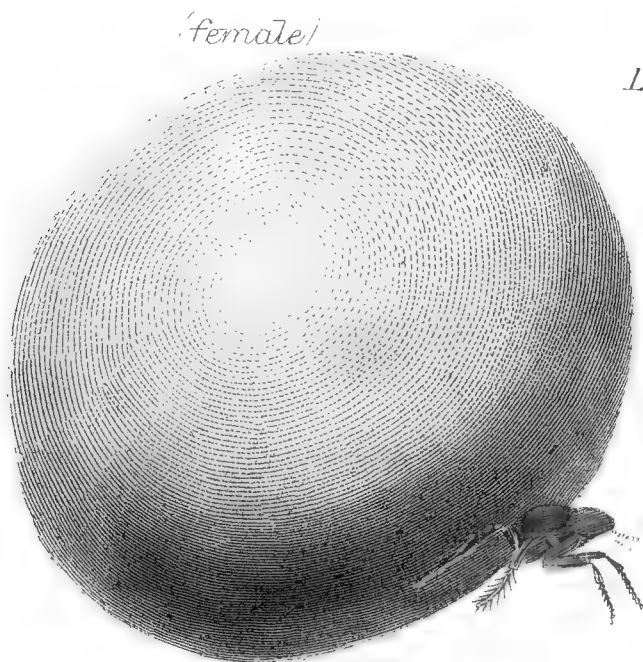


*Phasia hemiptera*

Order, APHANIPTERA.

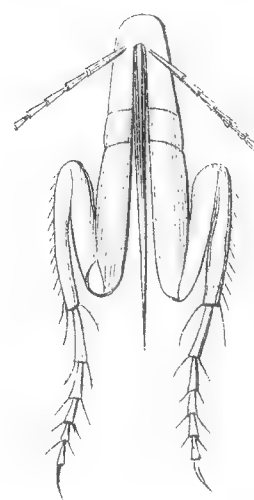


'male'



'female'

*Sarcopsylla Penetrans*, or Chigoe  
(highly magnified.)

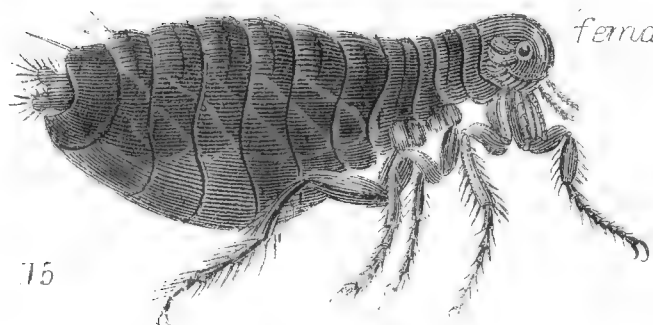


13



14

Egg



'female'

*Pulex irritans*  
Common Flea  
(highly magnified.)



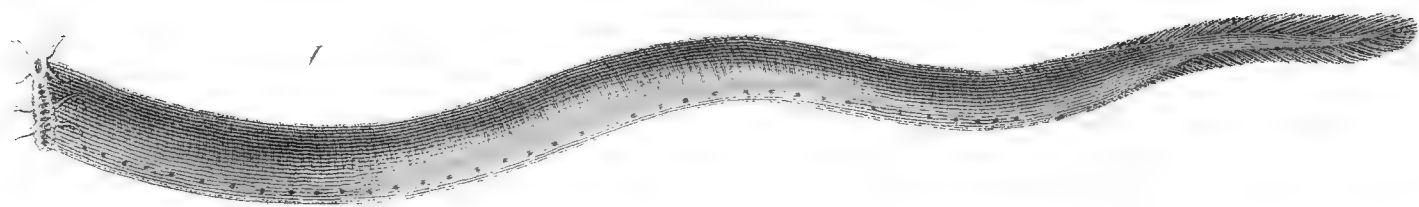
'male'

16



Orders Dermopteres Dermal finners 1 2  
 Malacopteres  
 Subdiv. Serpentineform Apodals 3 - 6

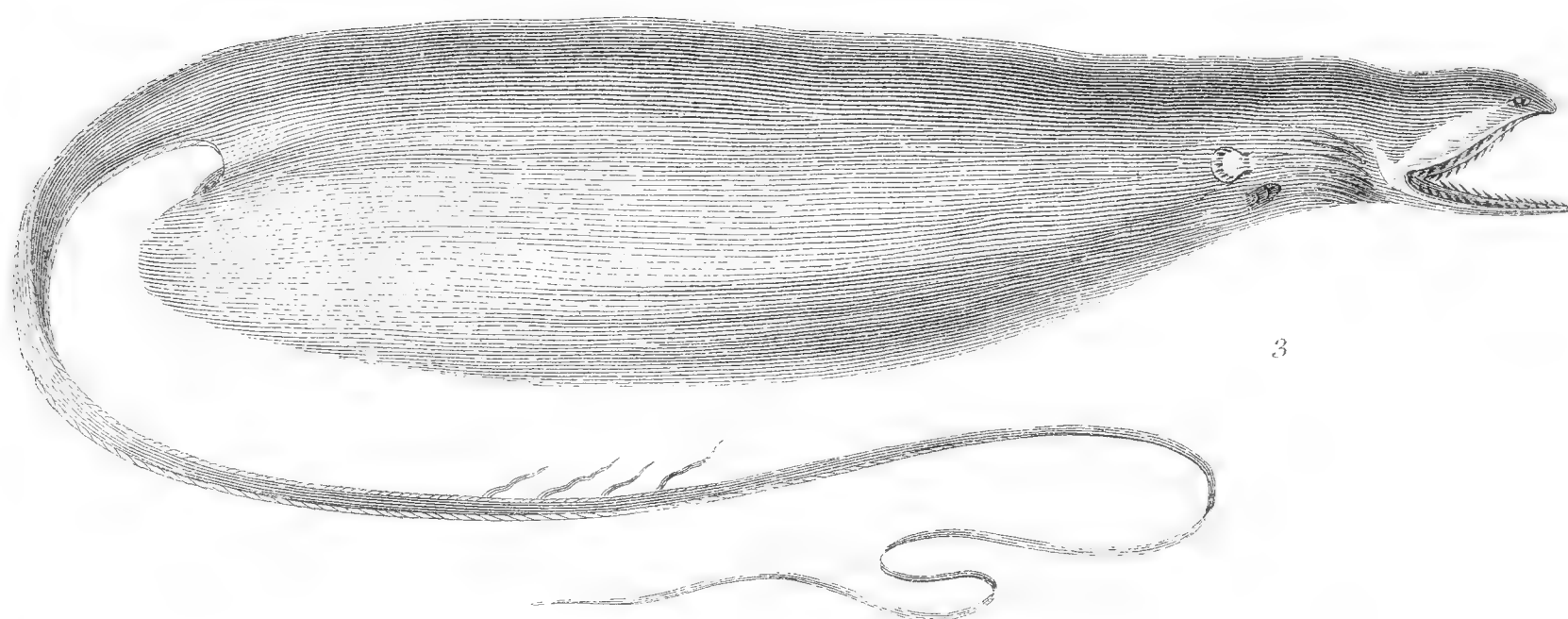
Families 1 Myxinoids  
 2 Symbranchs  
 3 4 Murries  
 5 6 Eels



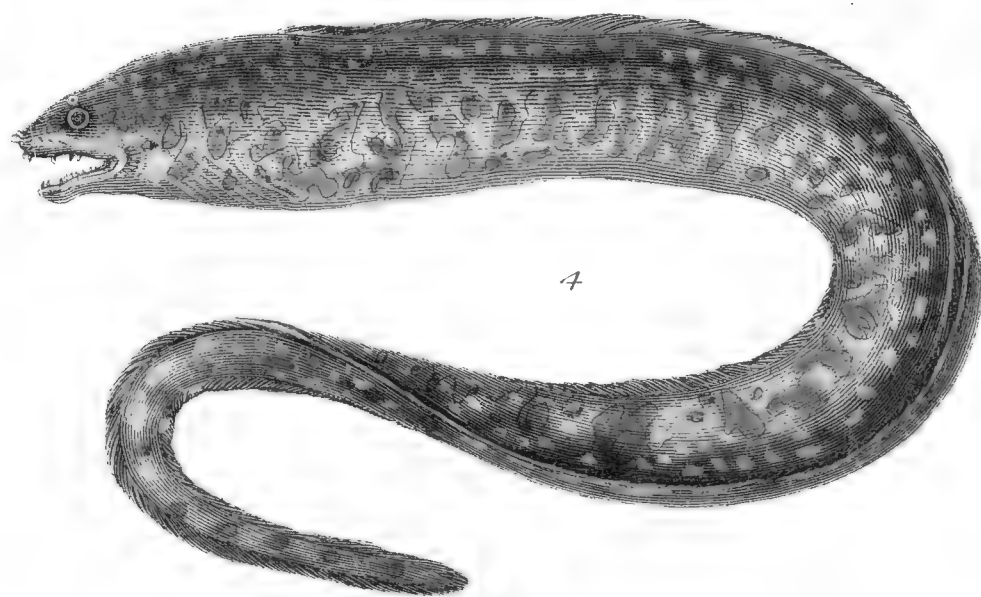
*Glutinous Hag.*



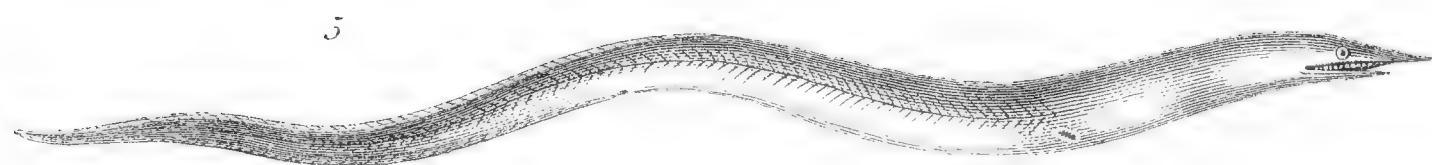
*Sea Lamprey.*



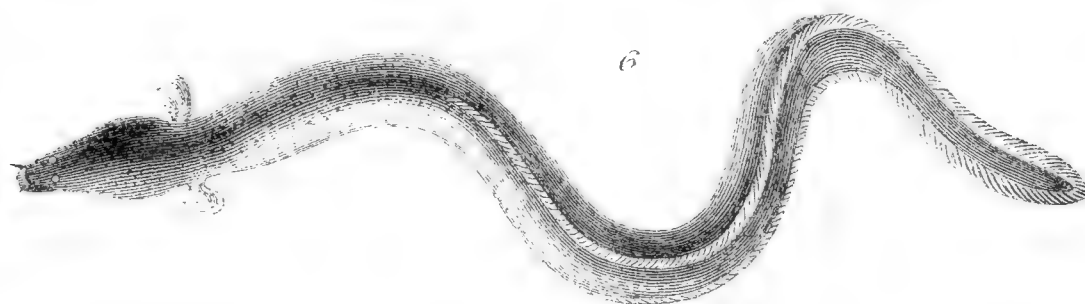
*Ophiognathus ampullaceus. — Barrel-fish.*



*The Pintado Murry.*



*Sphag. Rostratus.*



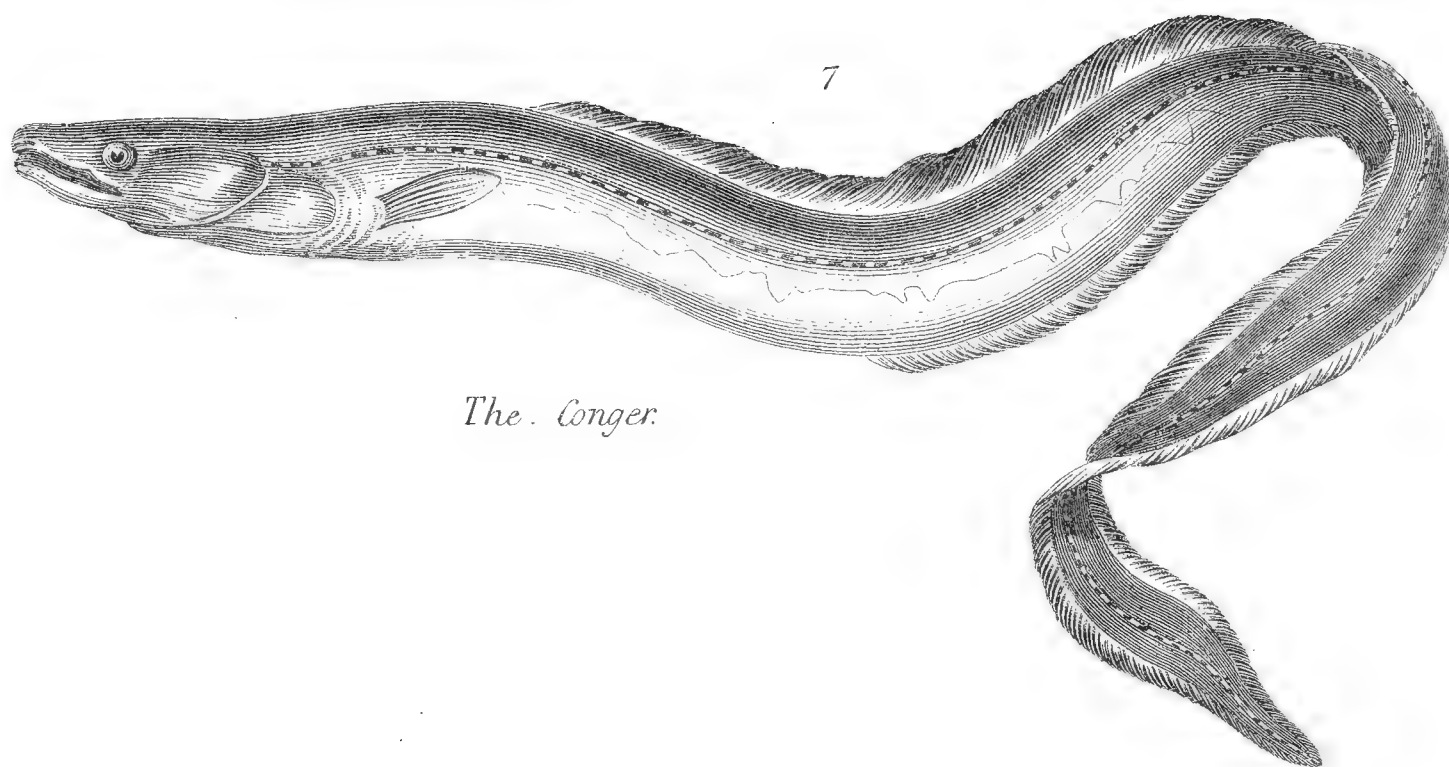
*Sharp-nosed Eel.*



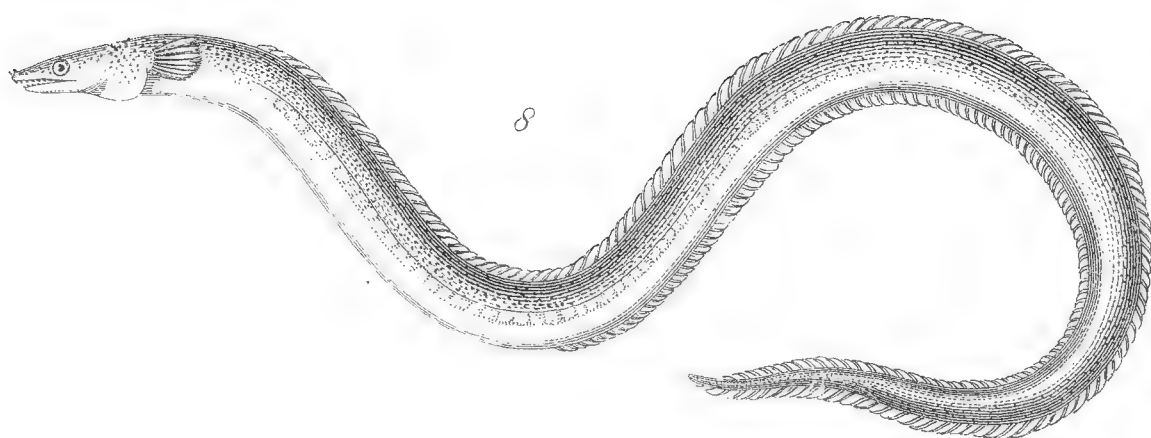


Order Malacopteres  
 Sub.div: Serpentiiform Apodals 7 8  
 Jointed-rayed Apodals 9 11

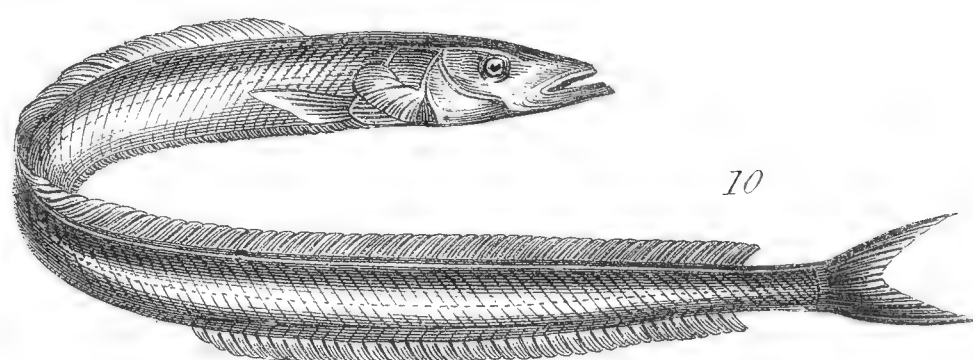
Families 7 Congers  
 8 Ophisures  
 9 Ophidians  
 10 Ammodytes  
 11 Gymnotes



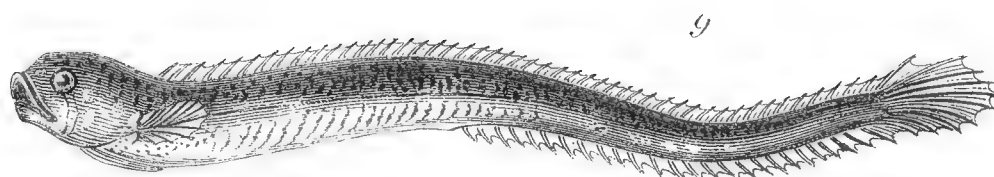
*The Conger.*



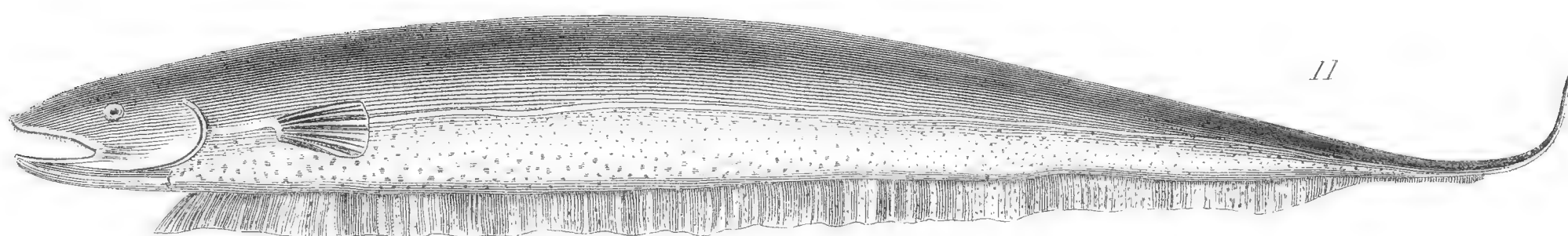
*The Hyala.*



*The Sand-Lance.*



*Montagu's Gymnote.*



*The Evenlipped Gymnote.*



FISHES

Order Malacopteres  
Sub.div. Abdominals

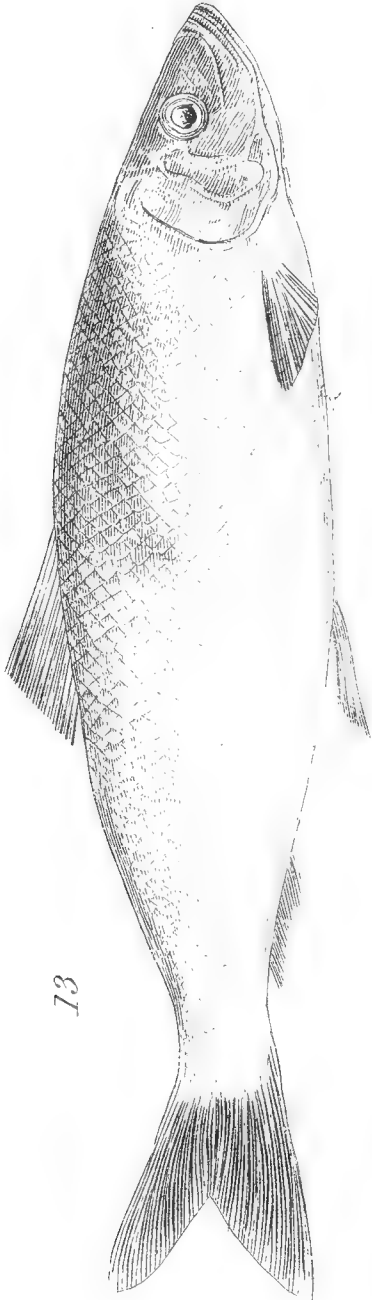
Families Leptocephaloids 12  
Herrings 13  
Salmon 14 15  
Scopelides 16  
Herring-pikes 17

12



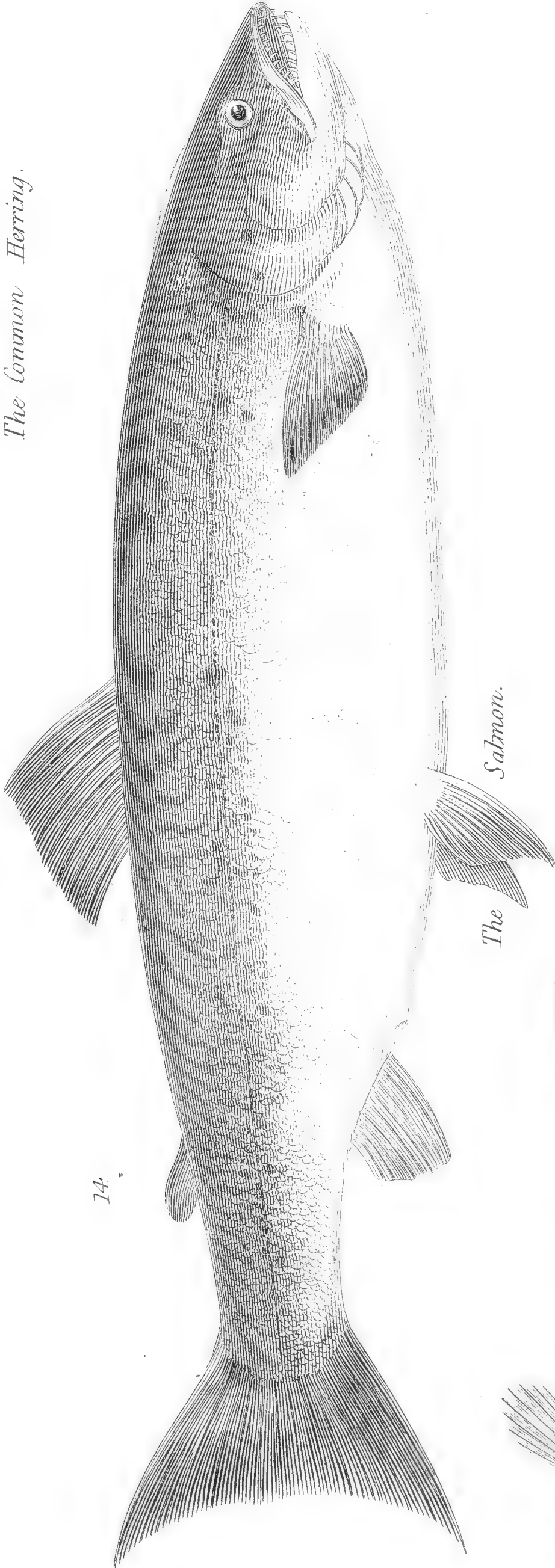
*The Morris*

13



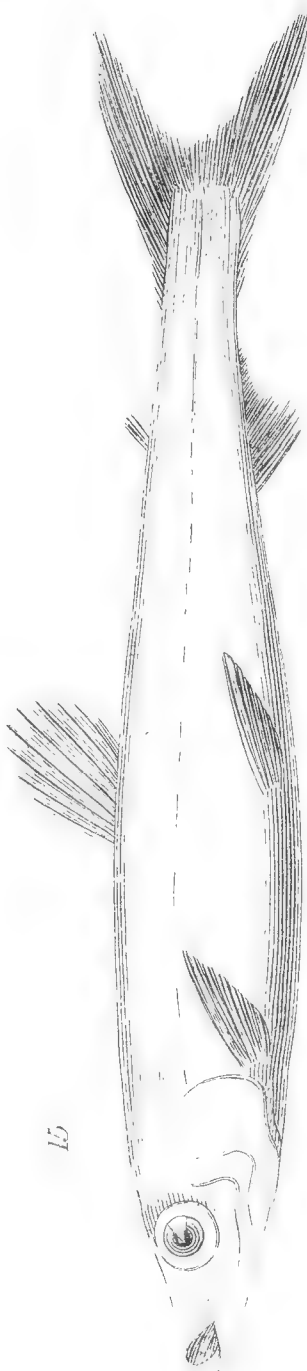
*The Common Herring.*

14



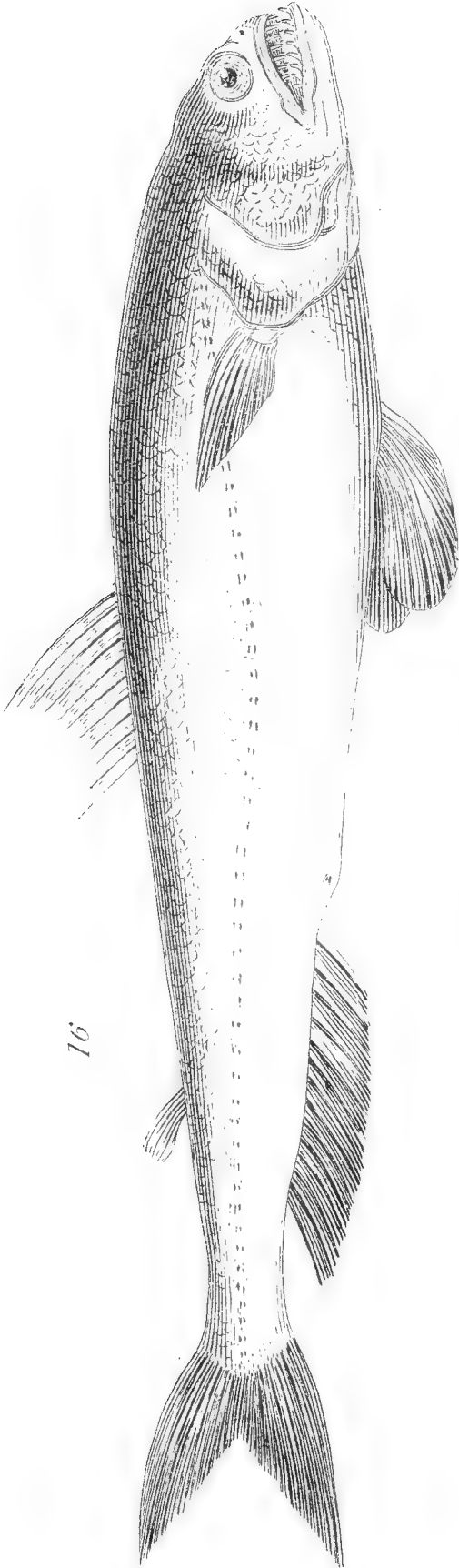
*The Salmon.*

15



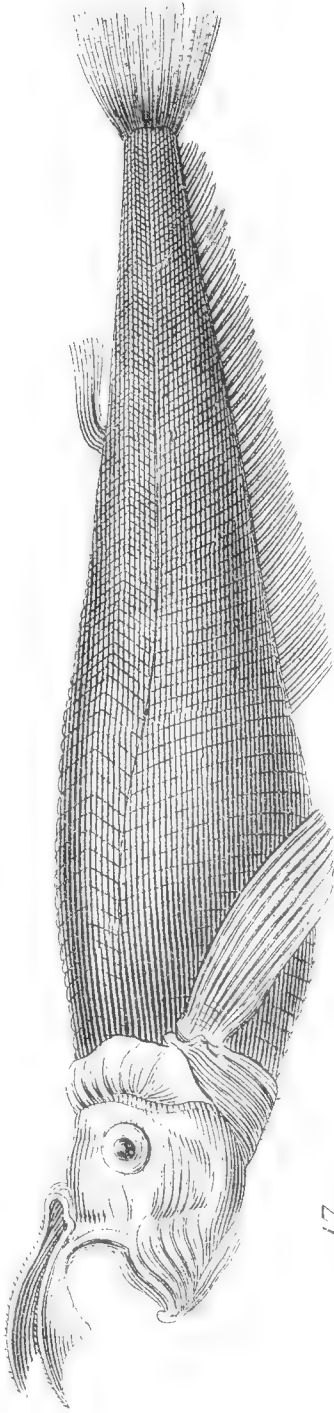
*The Mediterranean Argentine.*

16



*The Fetid Saury.*

17



*The Cayenne Idontognathe.*

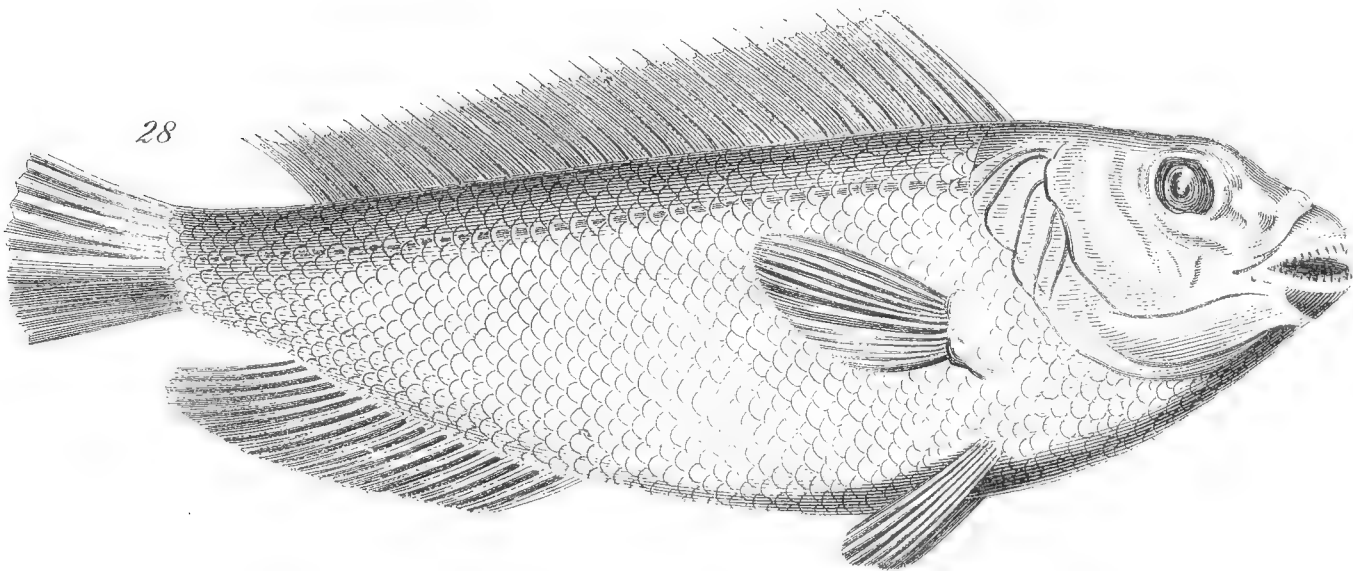
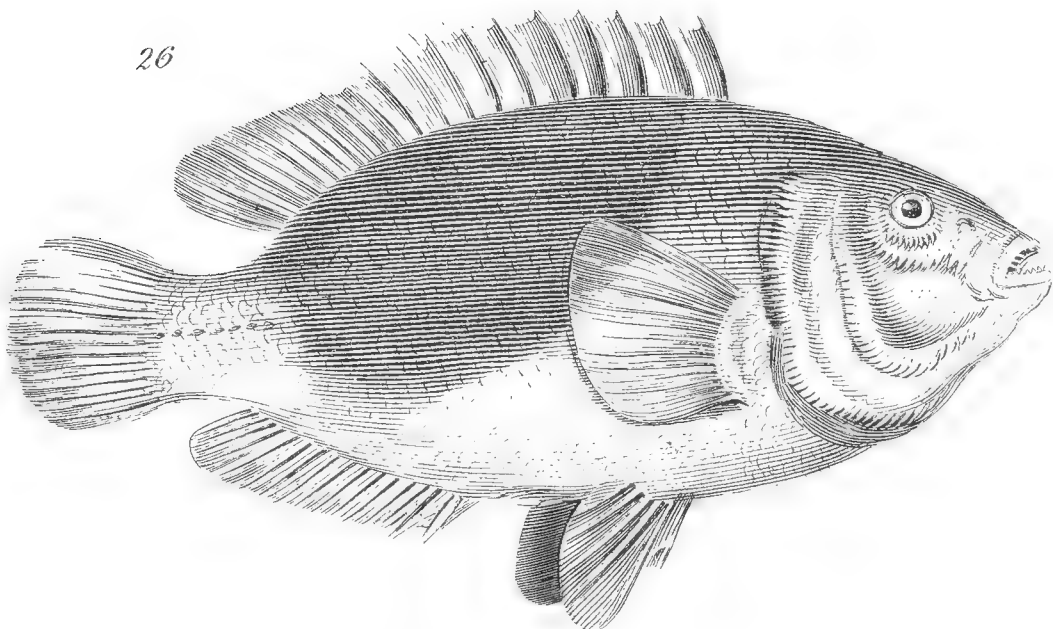
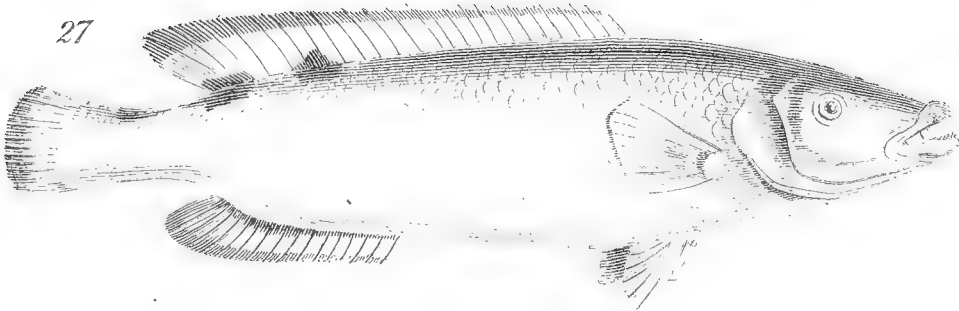
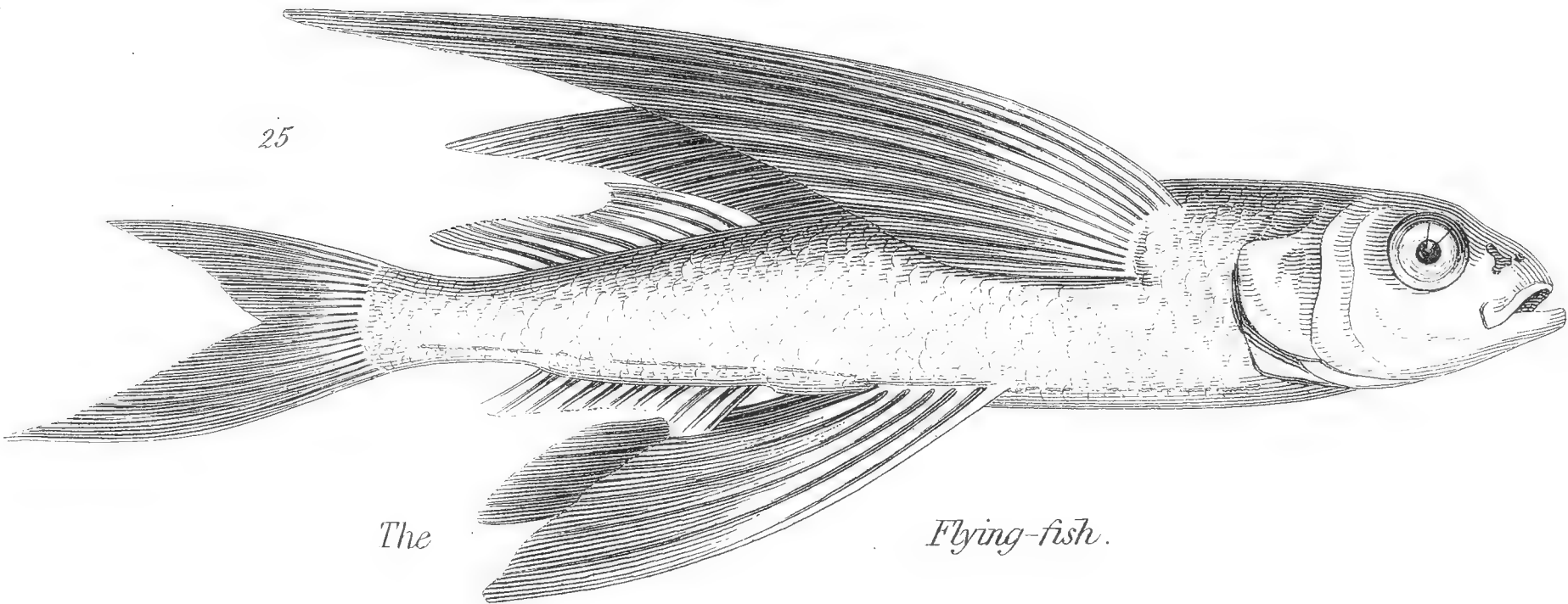




FISHES

Order Pharygognaths 25 28

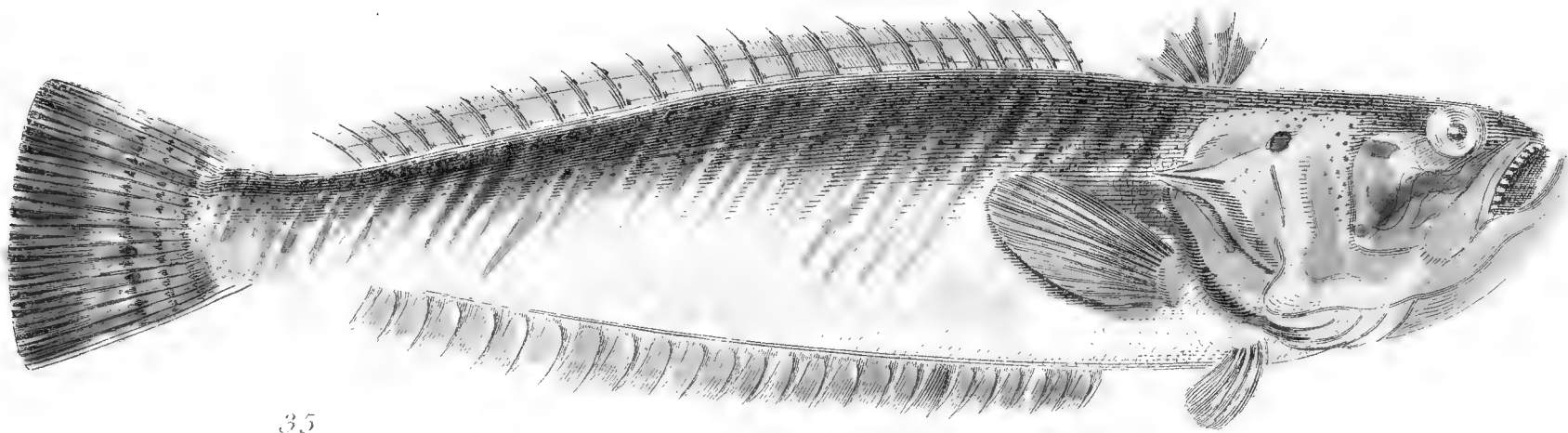
Families 24 Goniodonts  
25 Mackerel-pikes  
26 Cteno-labroids  
27 28 Cyclo-labroids





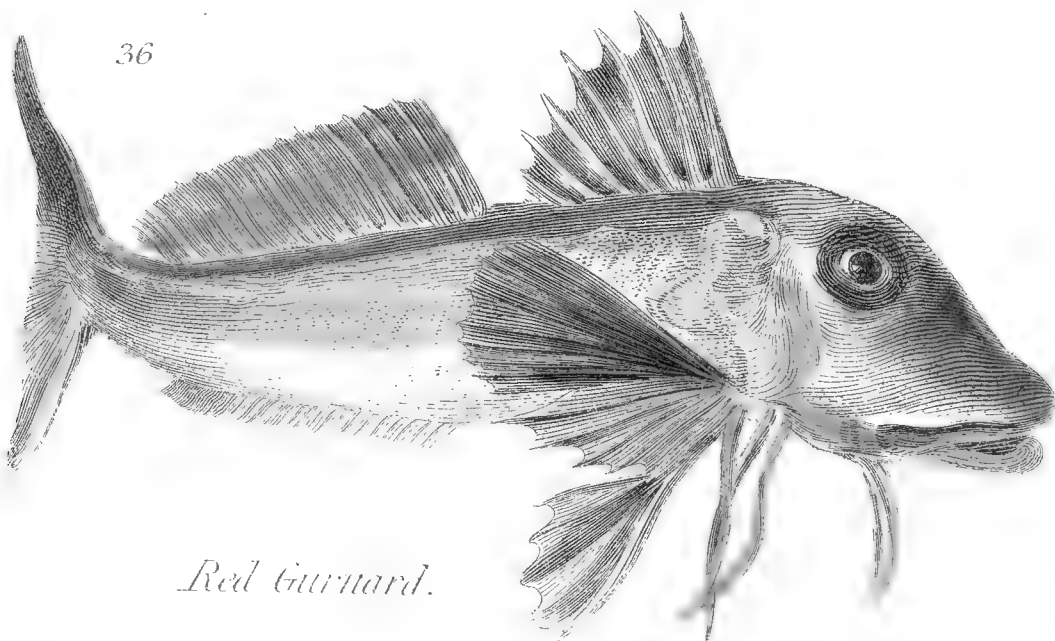
Order Acanthopteres

Families	Uranoscopes	35
	Mailed cheeks	36 37
	Surmullet	38
	Sciænoids	39



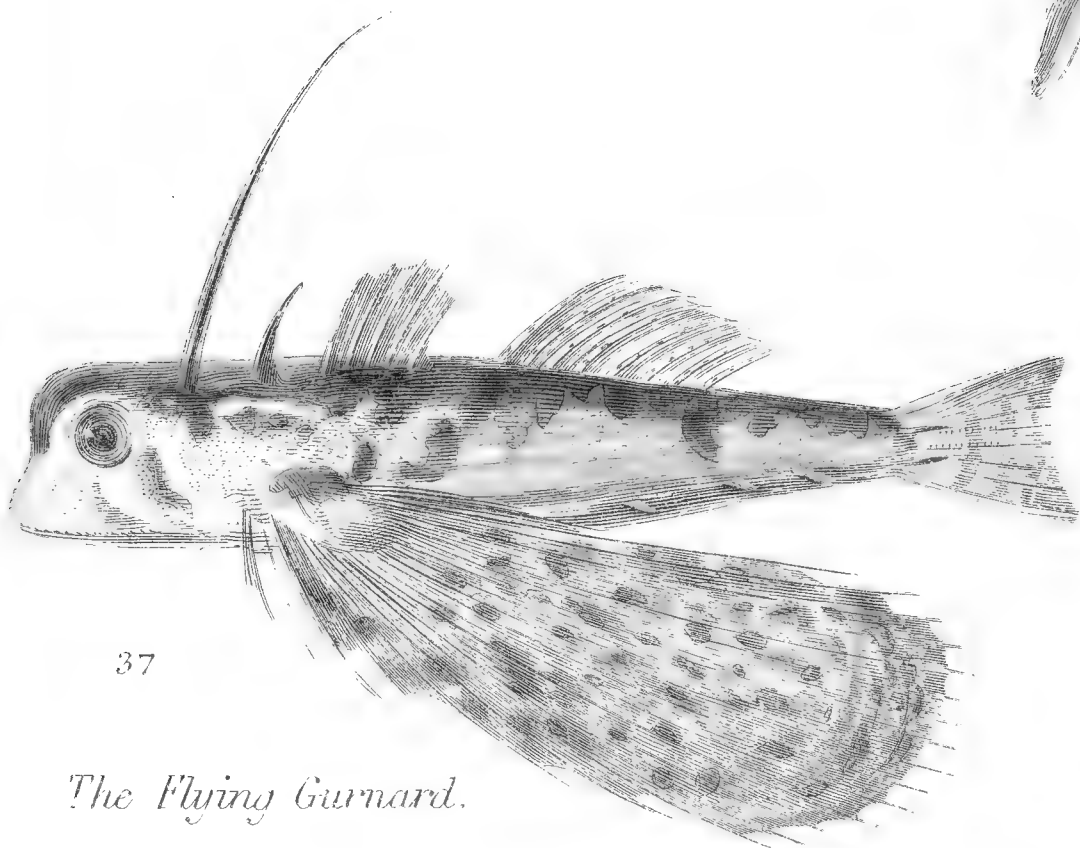
35

*Common Weaver.*



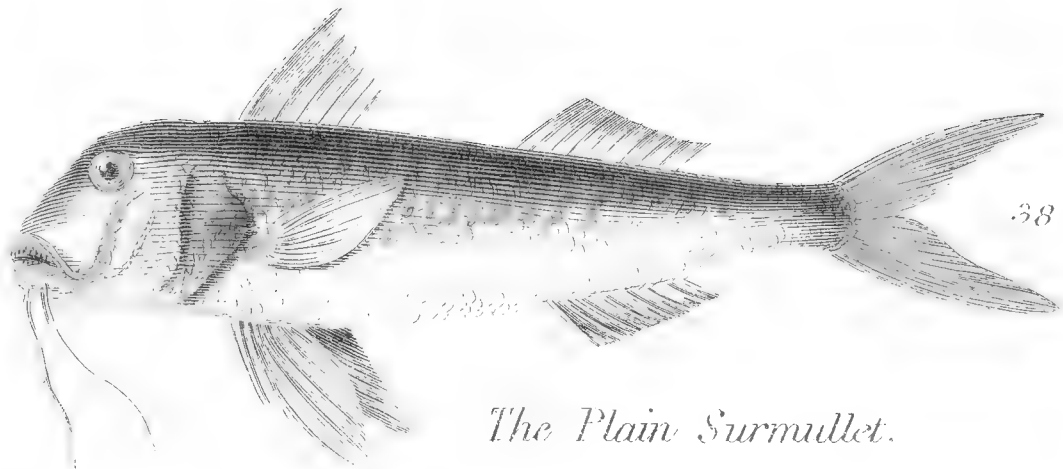
36

*Red Gurnard.*



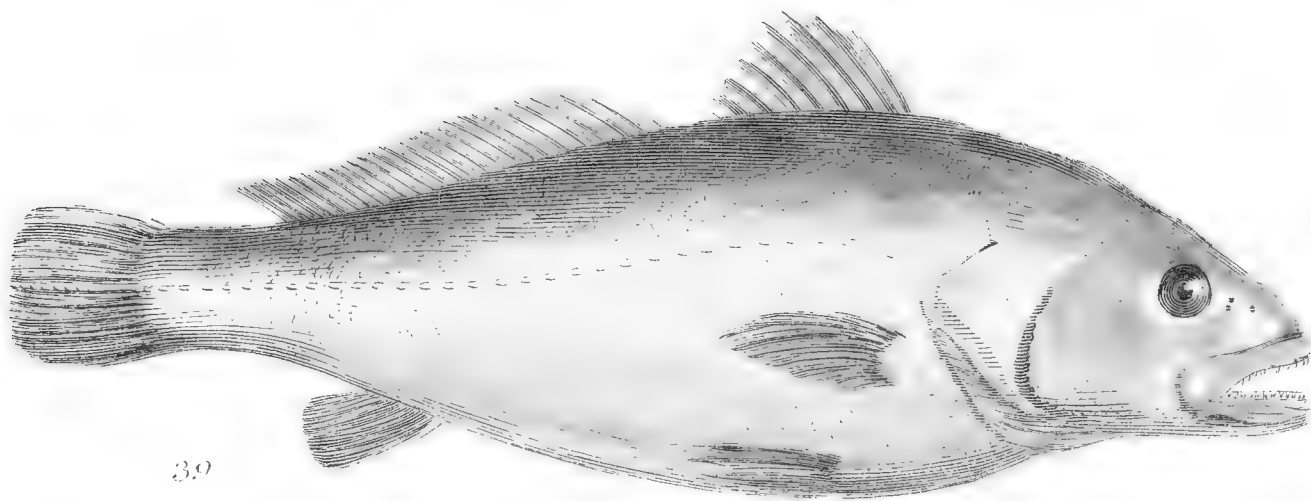
37

*The Flying Gurnard.*



38

*The Plain Surmullet.*



39

*The Maigre.*

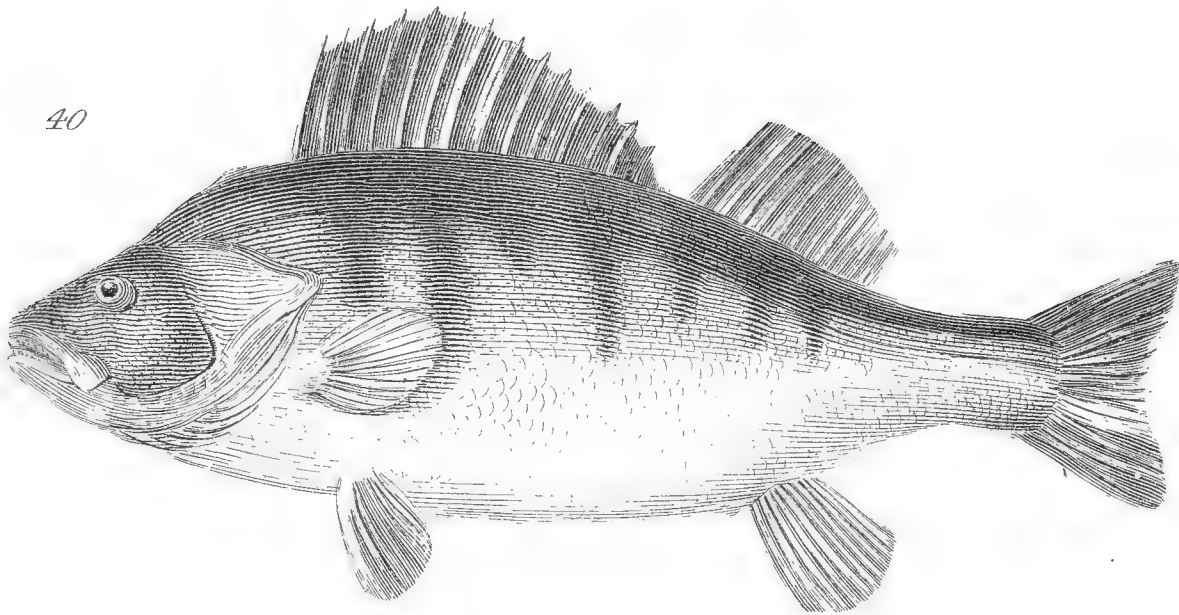




Order Acanthopteres.

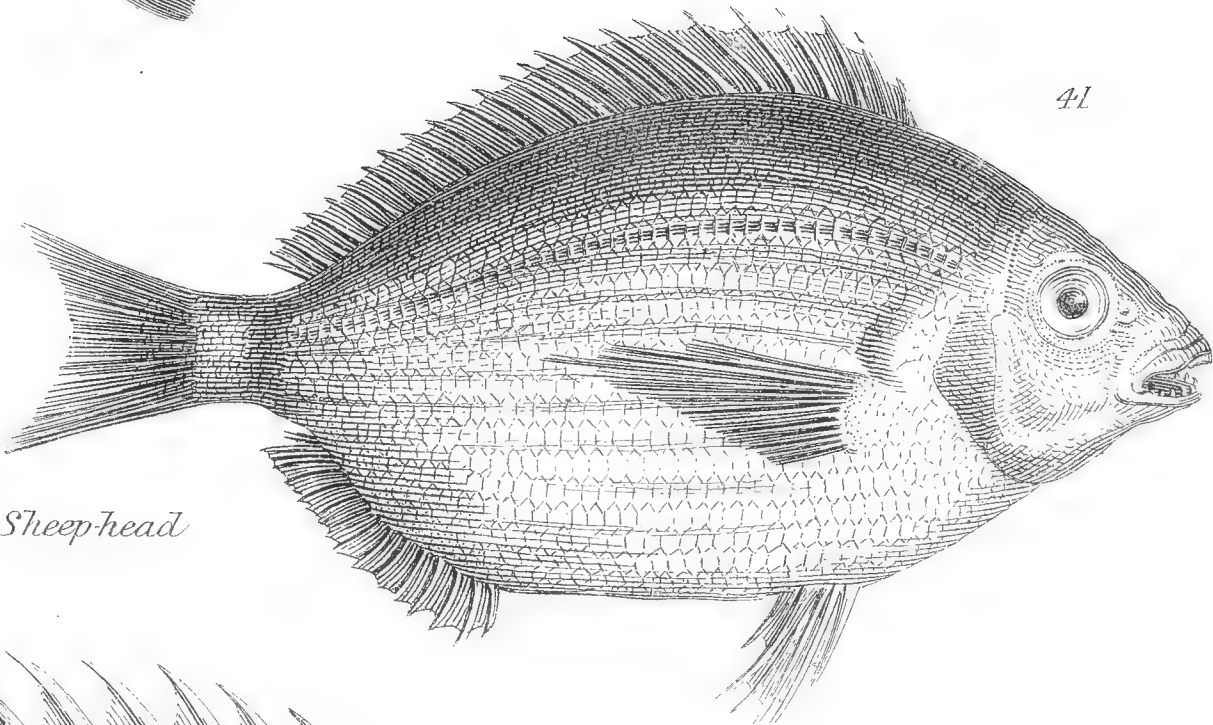
Families	Percoids	40
	Sparoids	41 42
	Mænoids	43 44

40



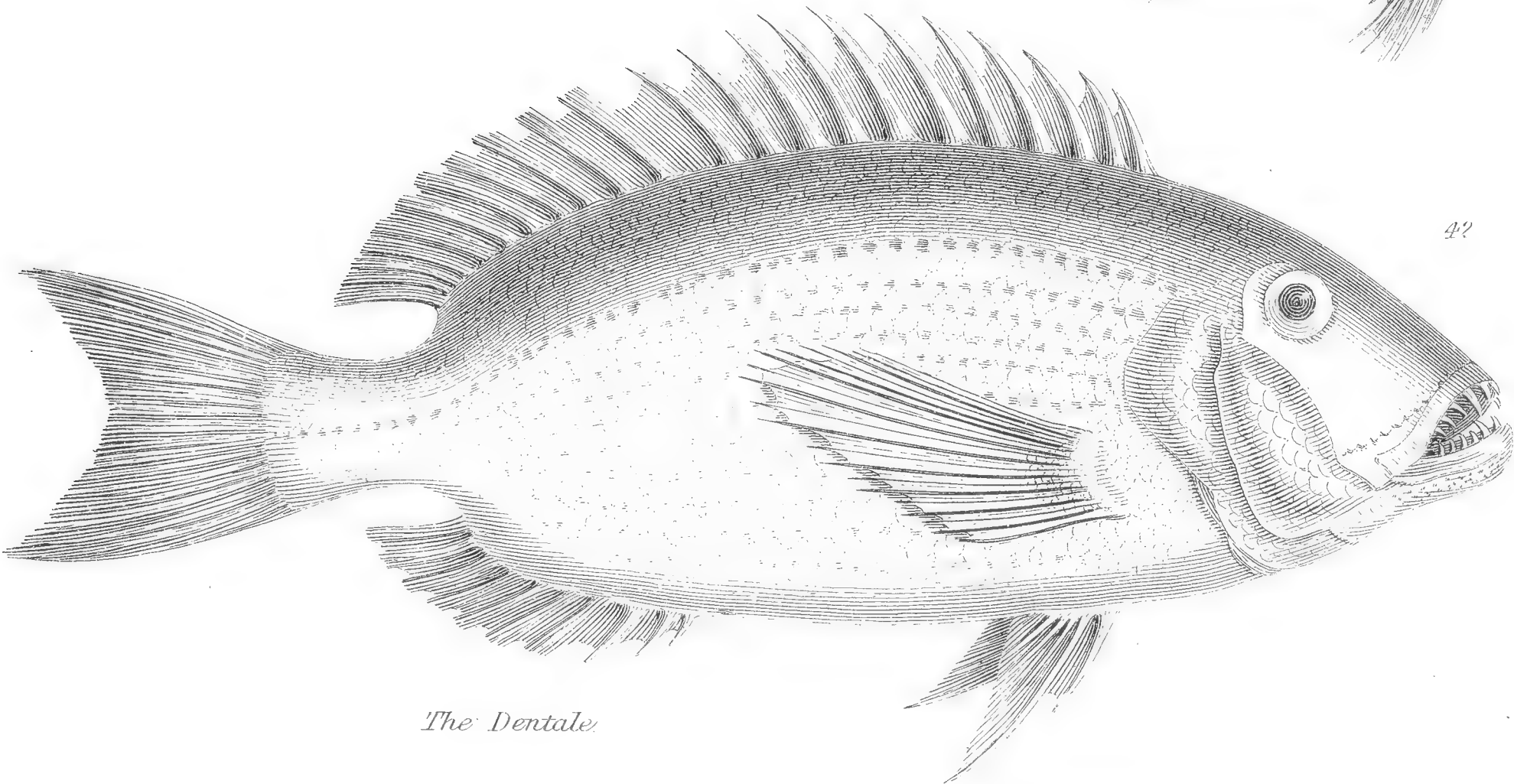
*The Perch*

41



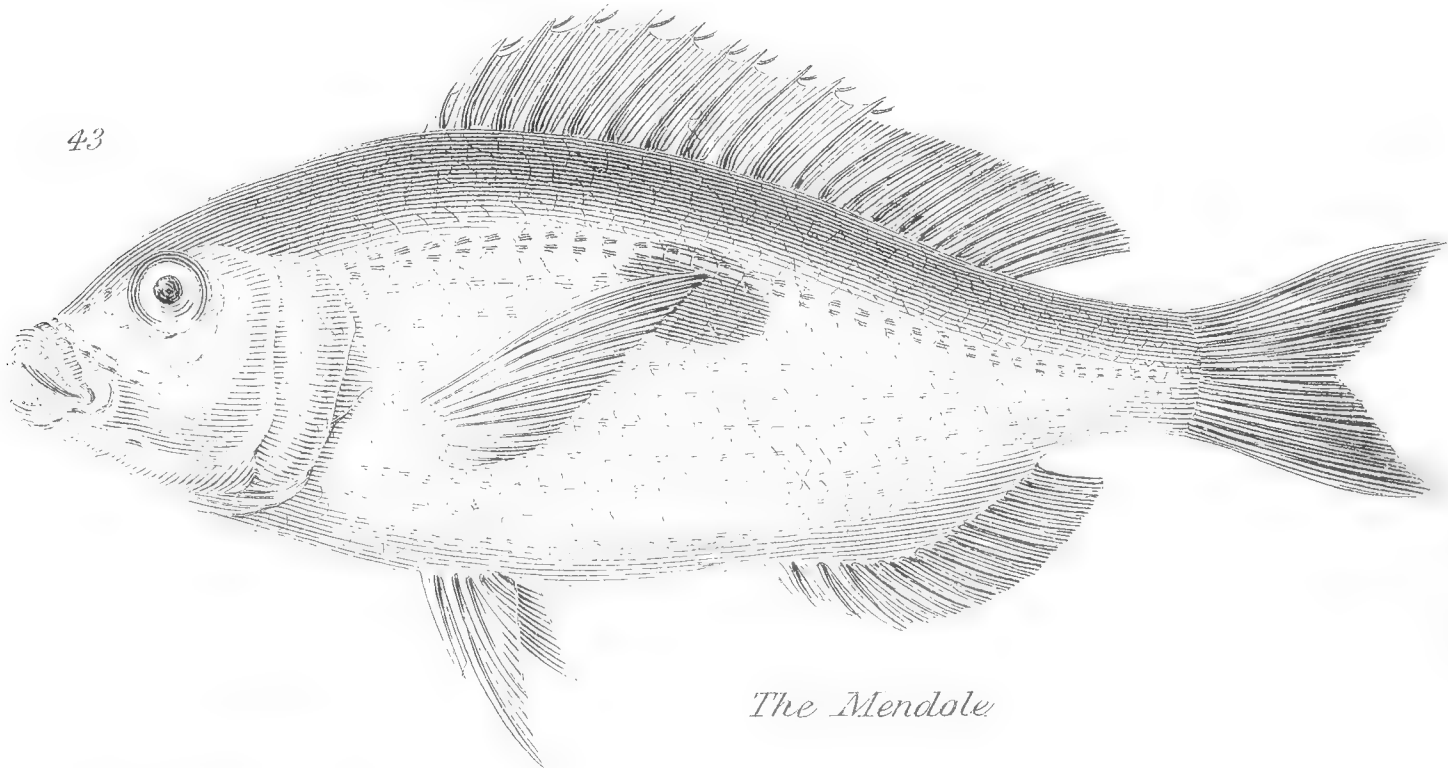
*The Ring-tailed Sheep-head*

42



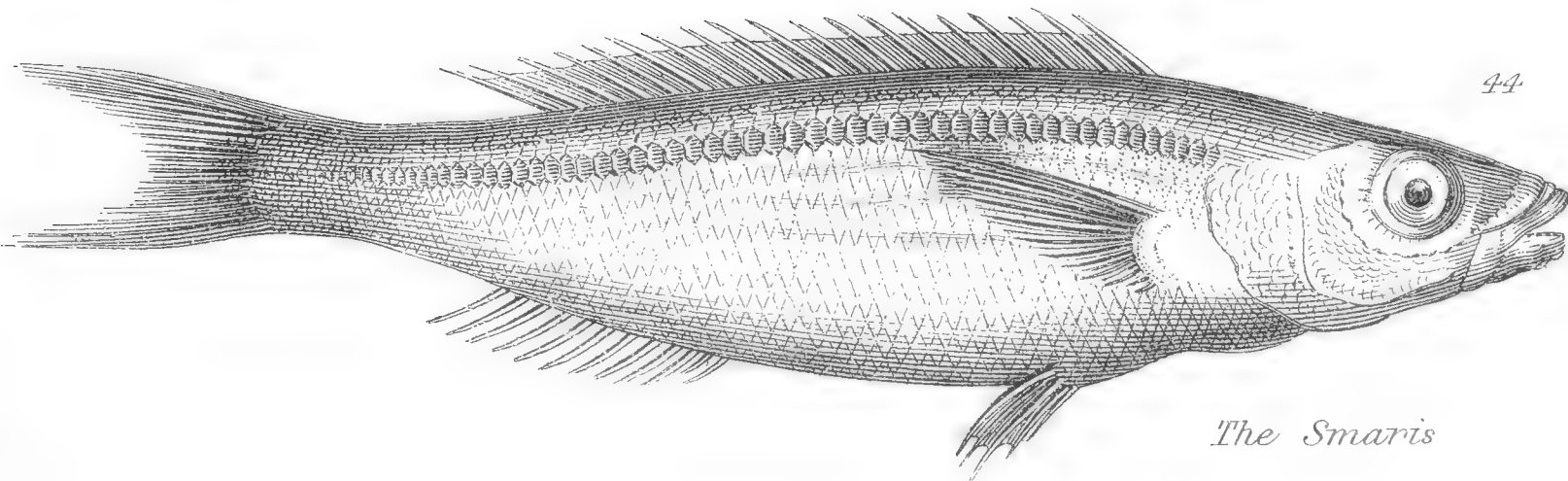
*The Dentale*

43



*The Mendole*

44

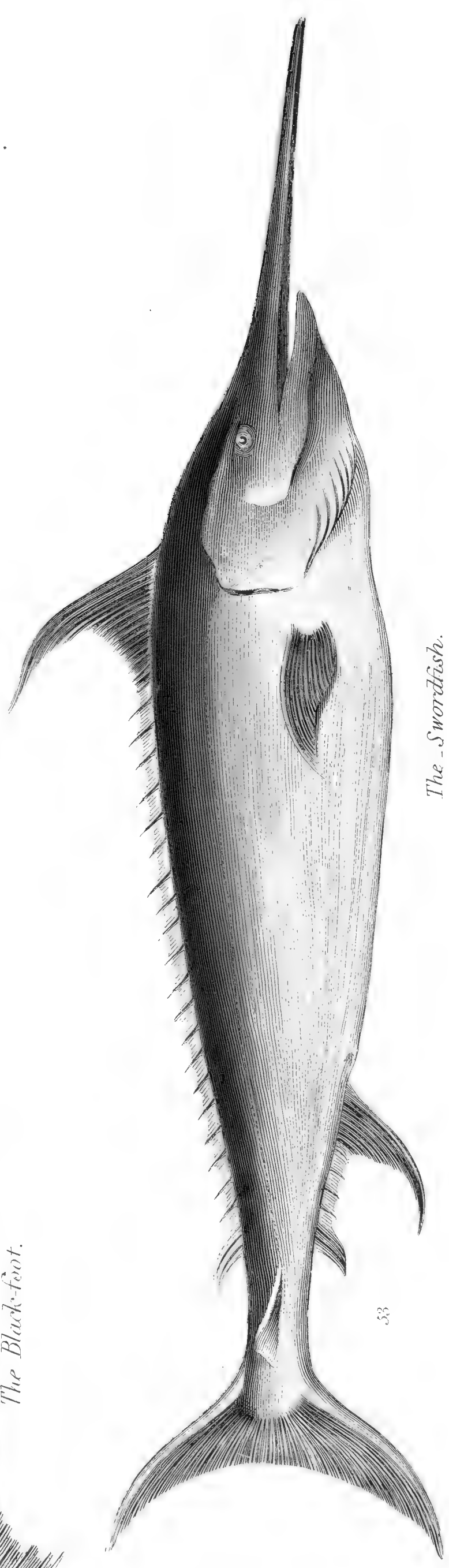
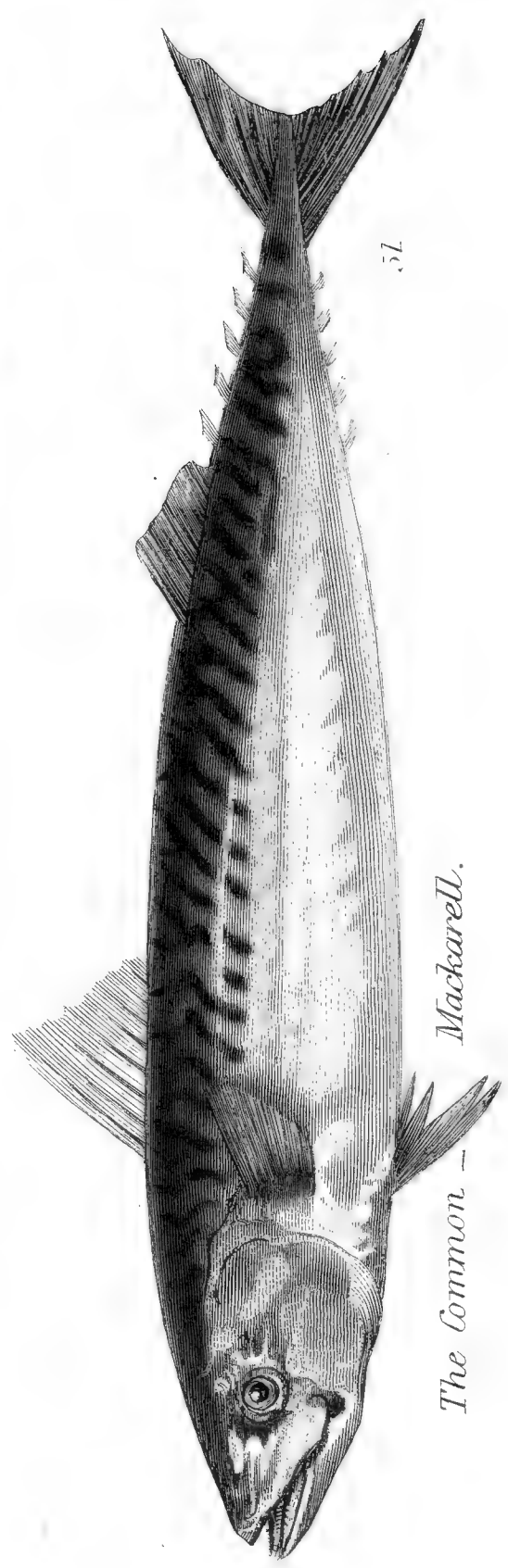
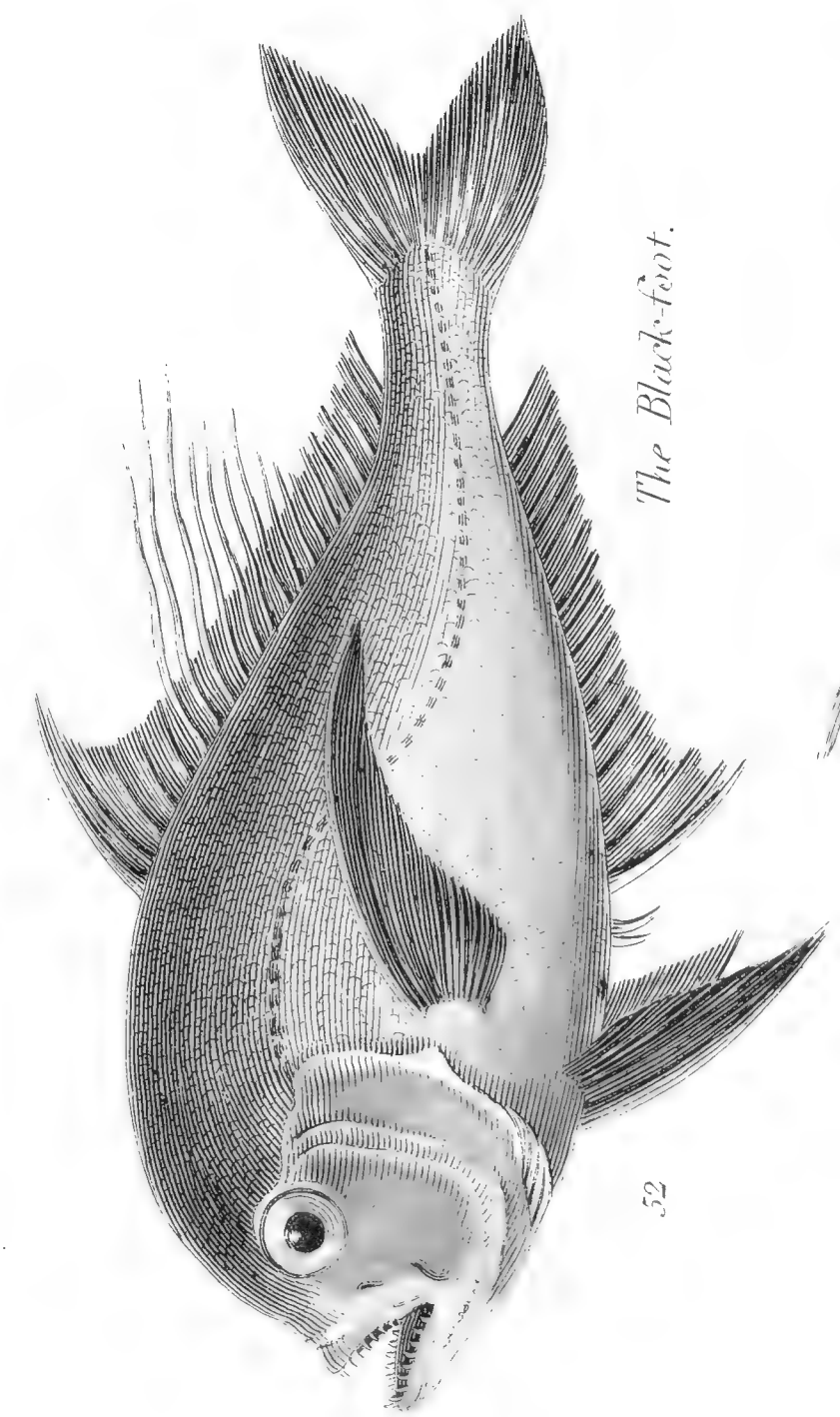
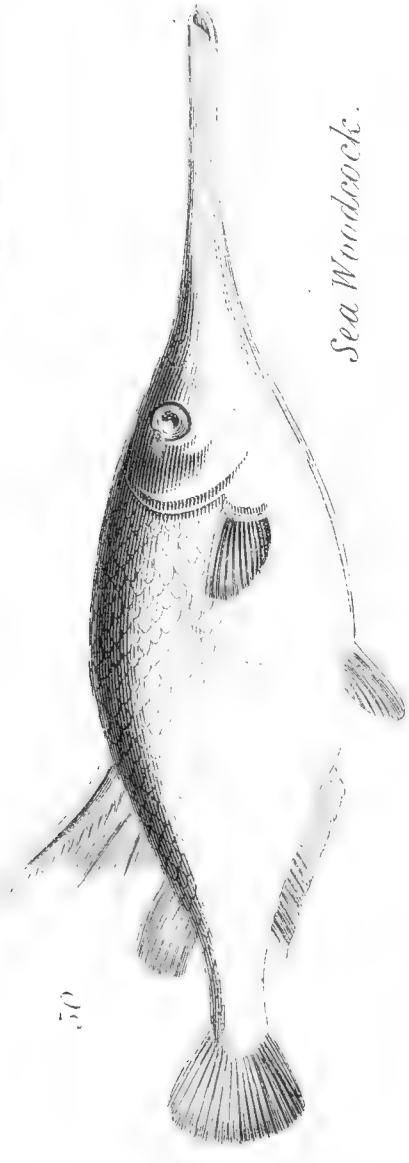


*The Smaris*



FISHES

Order: Acanthopteres

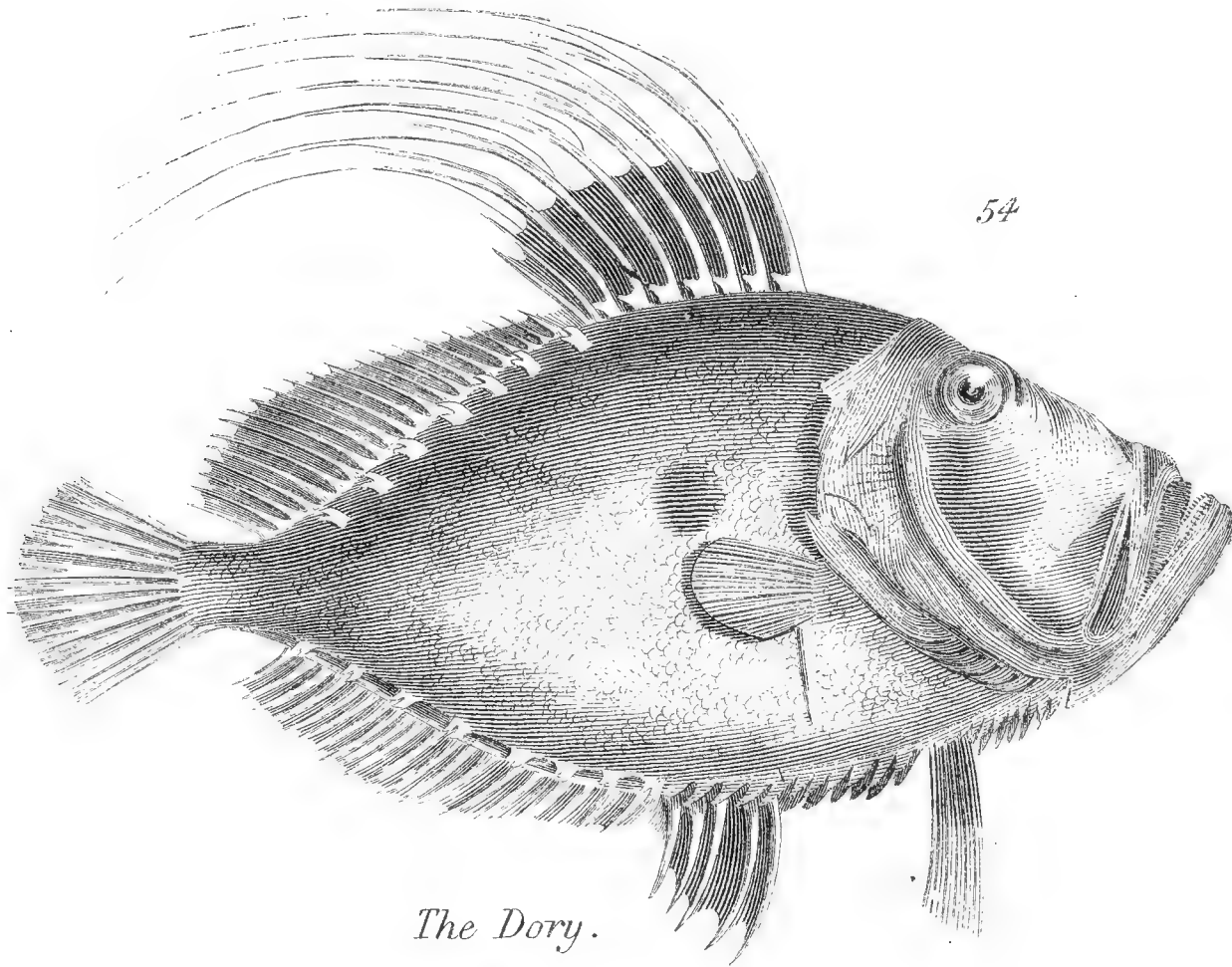




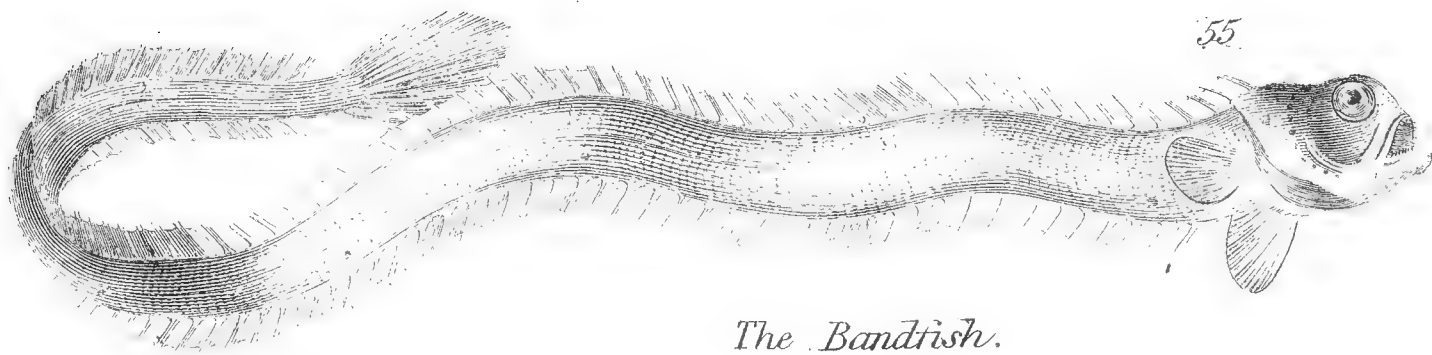


Order Acanthopteres

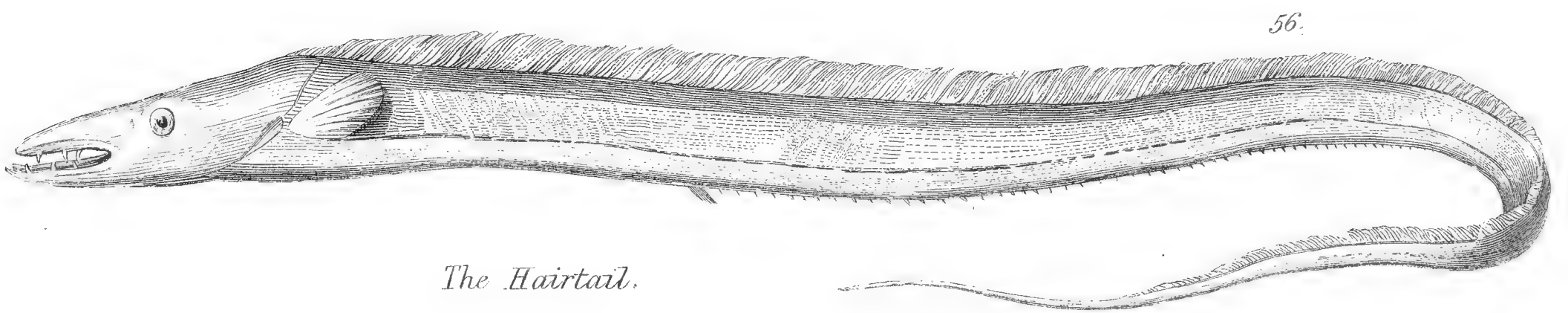
Families 54 Dories  
55 Band fishes  
56 57 Scabbard fishes  
58 Teuthyoids



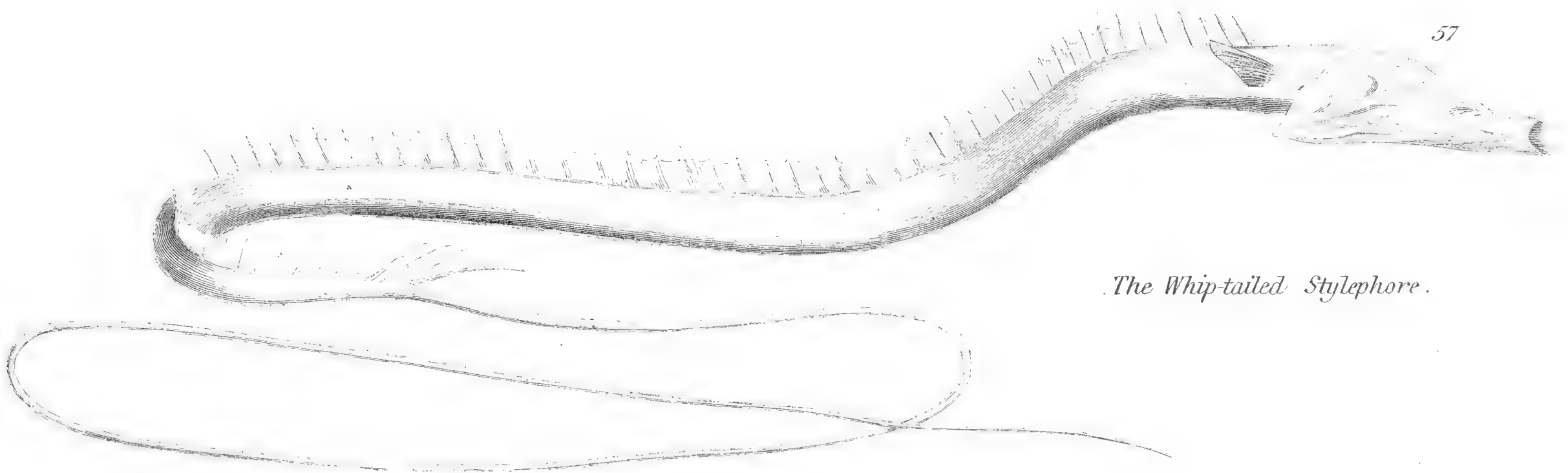
*The Dory.*



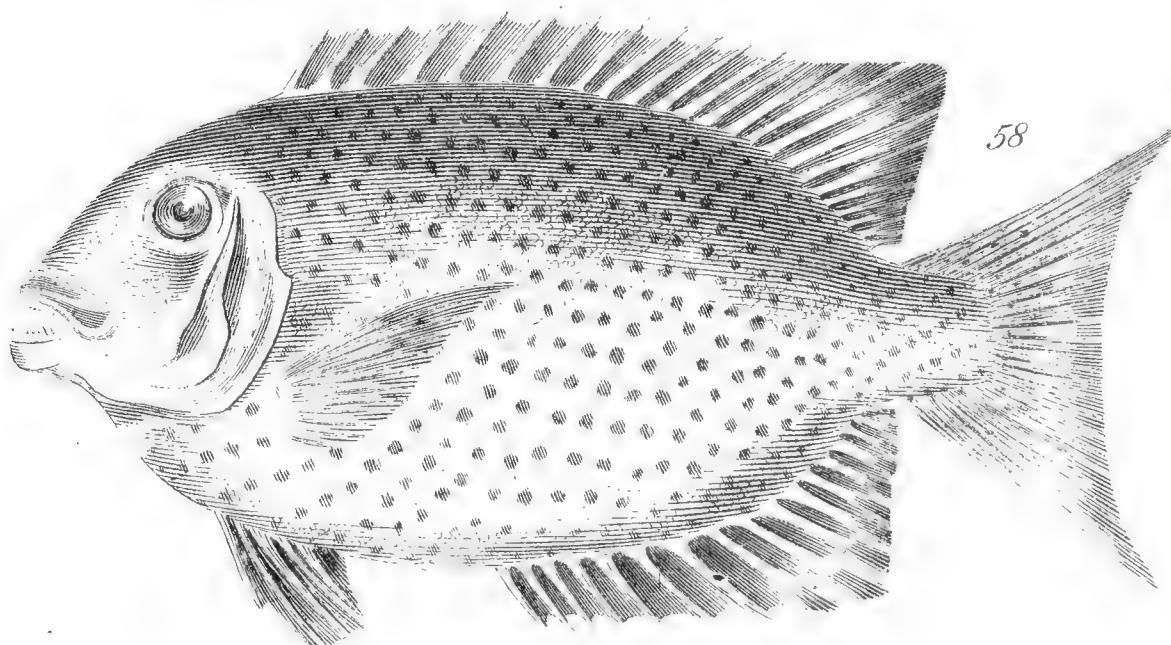
*The Bandfish.*



*The Hairtail.*



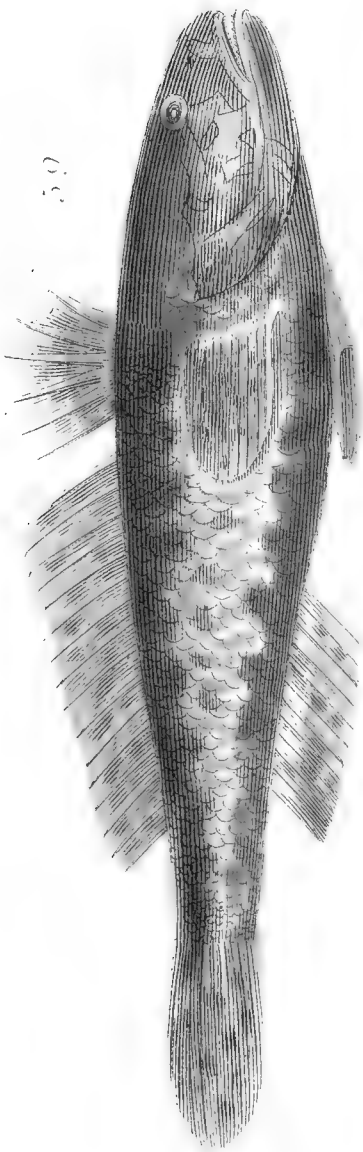
*The Whip-tailed Stylephore.*



*The Dotted Amphacanth.*

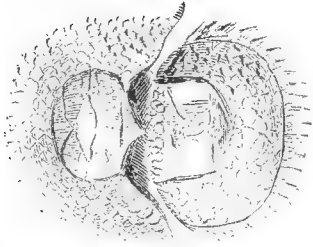


<i>Families</i>	Gobioids	59	60
	Blennioids	61	
	Lophioids	62	
	Wolf fishes	63	



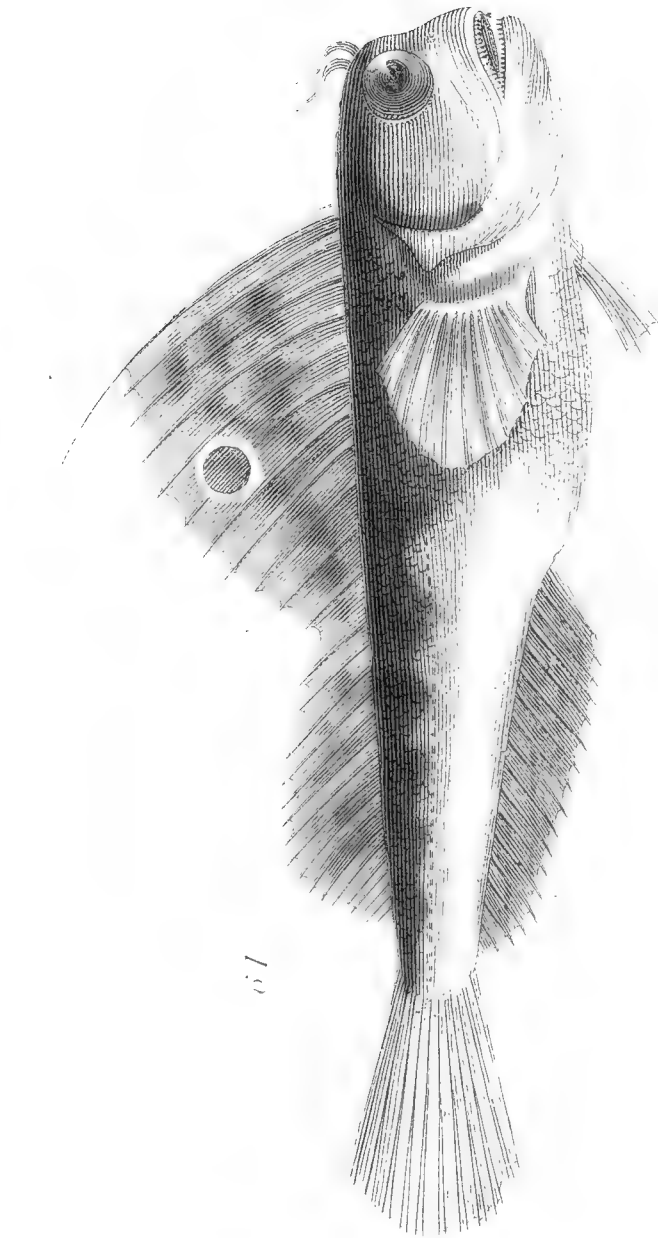
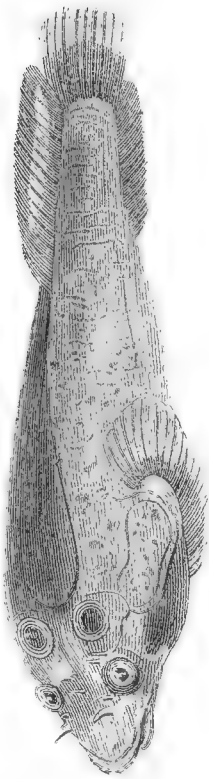
59

*The Black Goby.*



*The Cornish Sucker.*

60



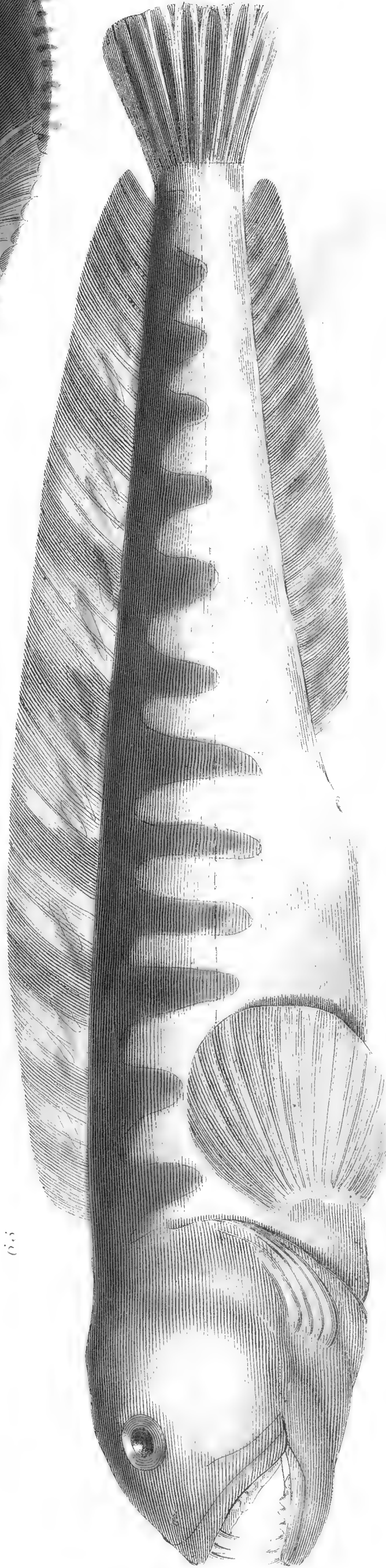
61

*The Butterfly-fish.*



62

*Common Angler.*



63

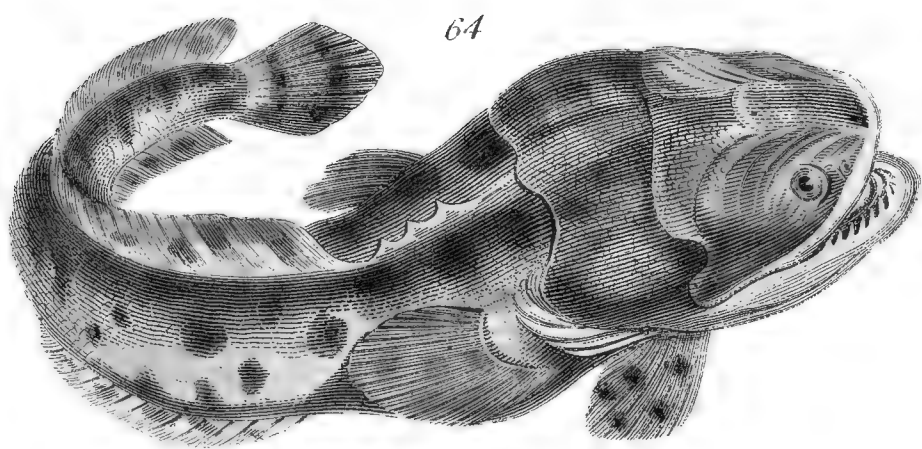
*The Wolf-fish.*



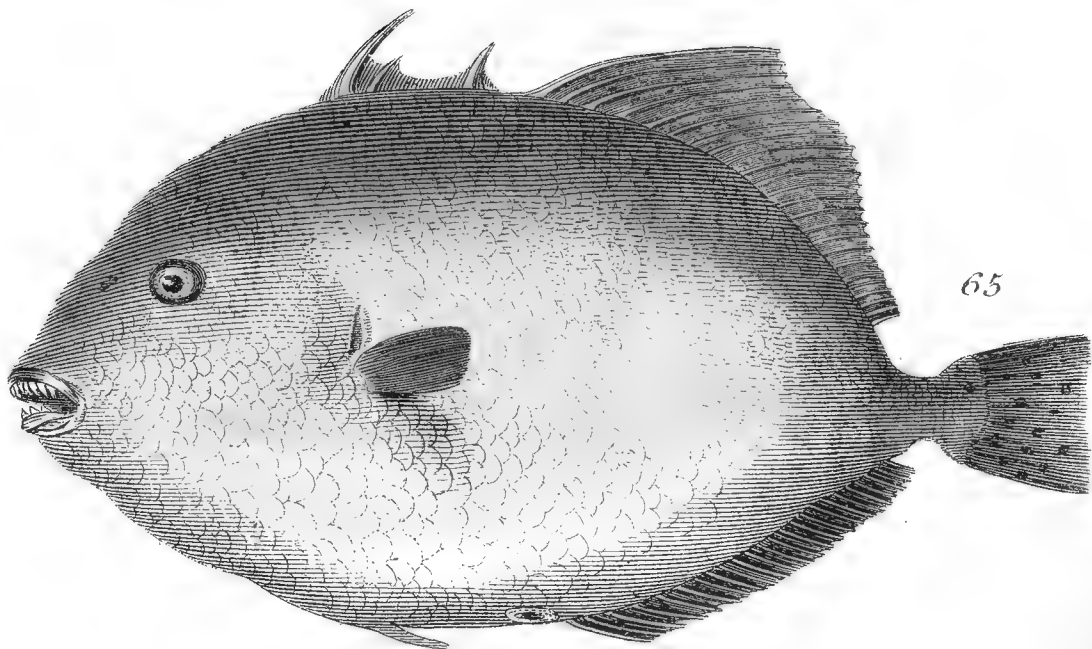


Orders    Acanthopteres 64  
             Plectognaths 65 68

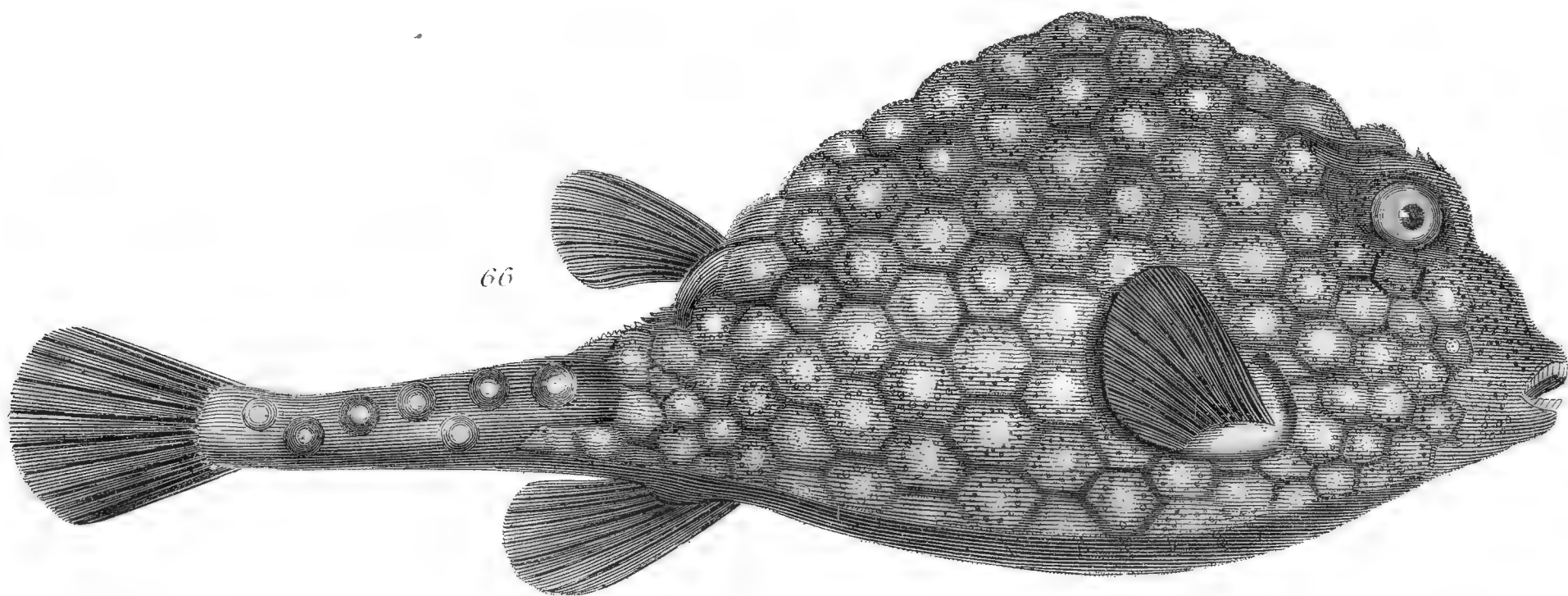
Families    Batrachoids 64  
                 Trigger-fishes 65  
                 Coffe-fishes 66  
                 Gymnodonts 67 68



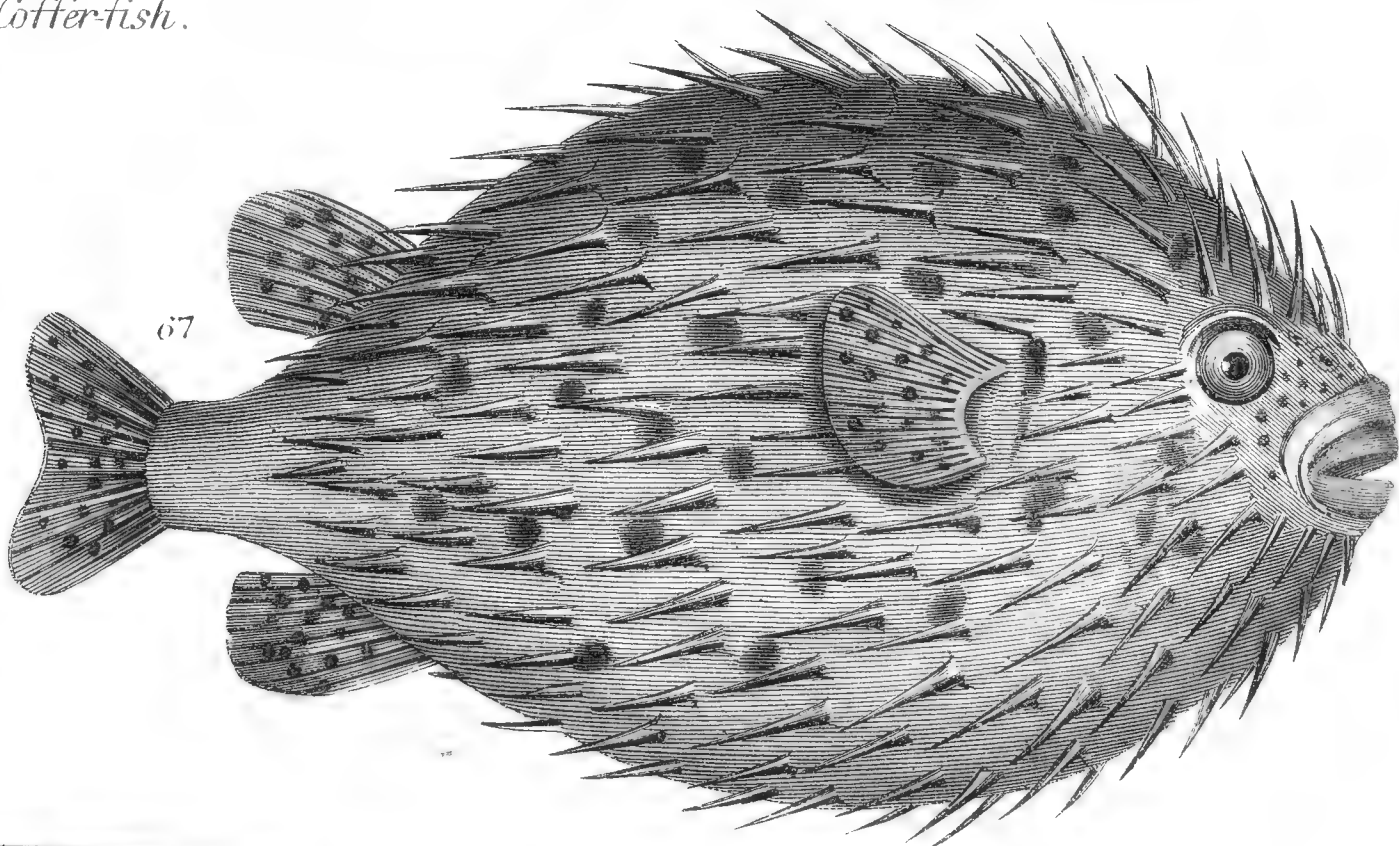
*Surinam Toad-fish.*



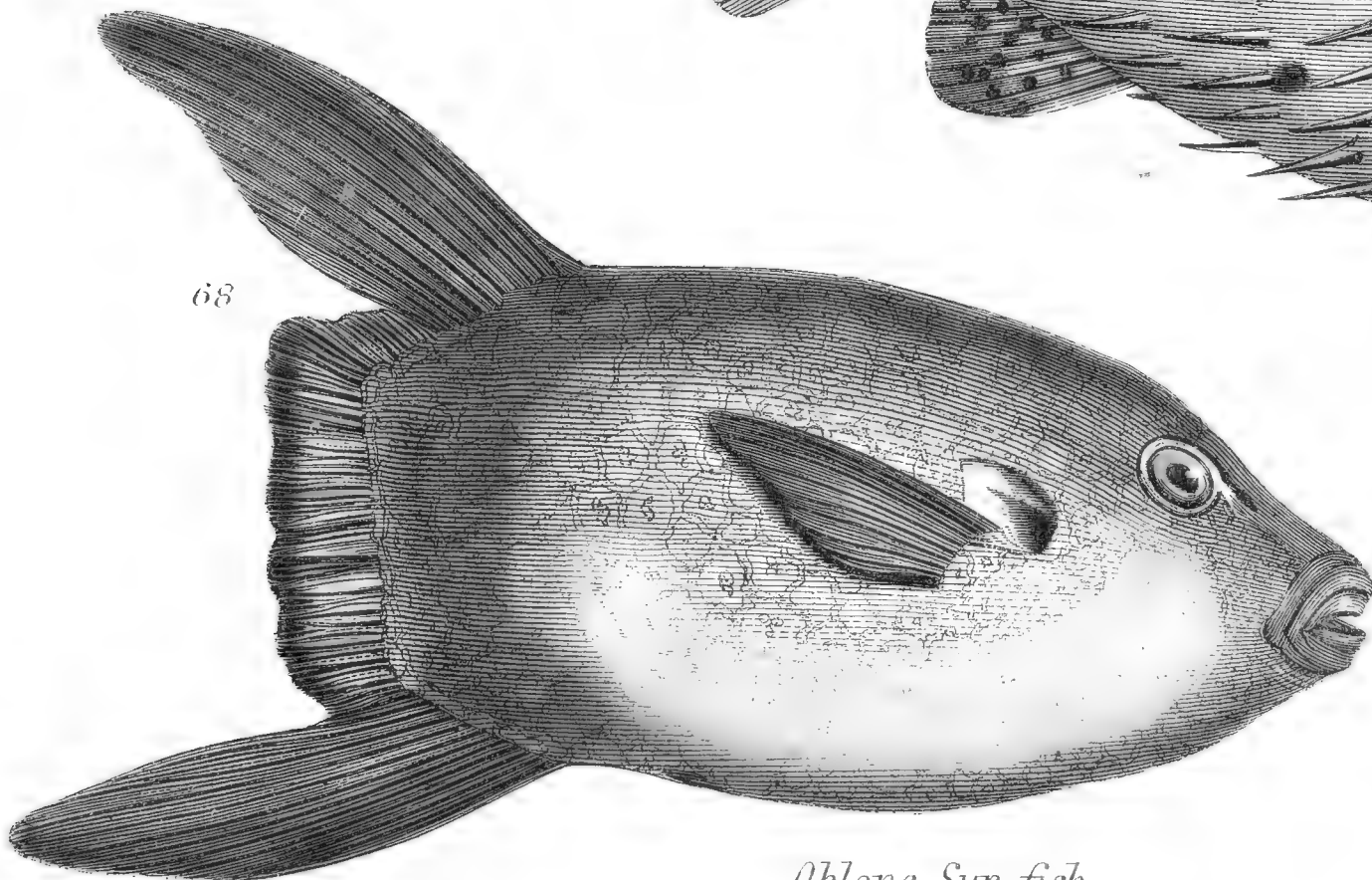
*The Trigger-fish.*



*The Chevron-backed Coffe-fish.*



*Dotted Hedgehog-fish*



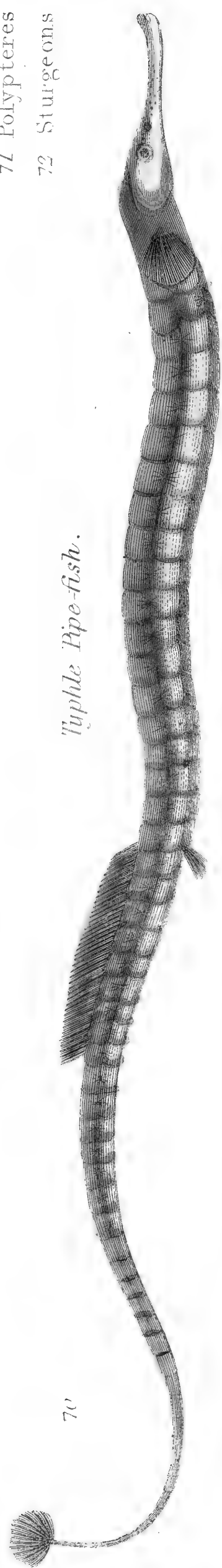
*Oblong Sun-fish.*



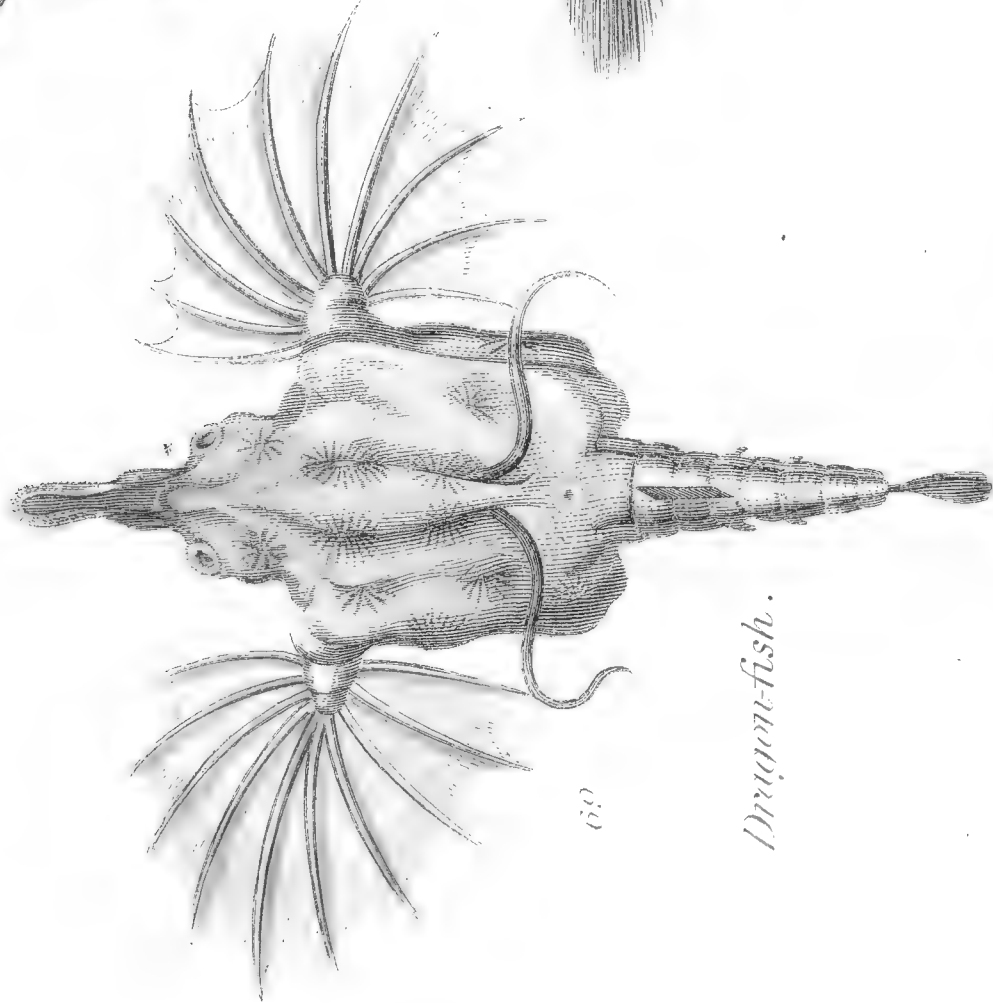
FISHES

Order's Lophobranchs 69 70  
Canoids 71 72

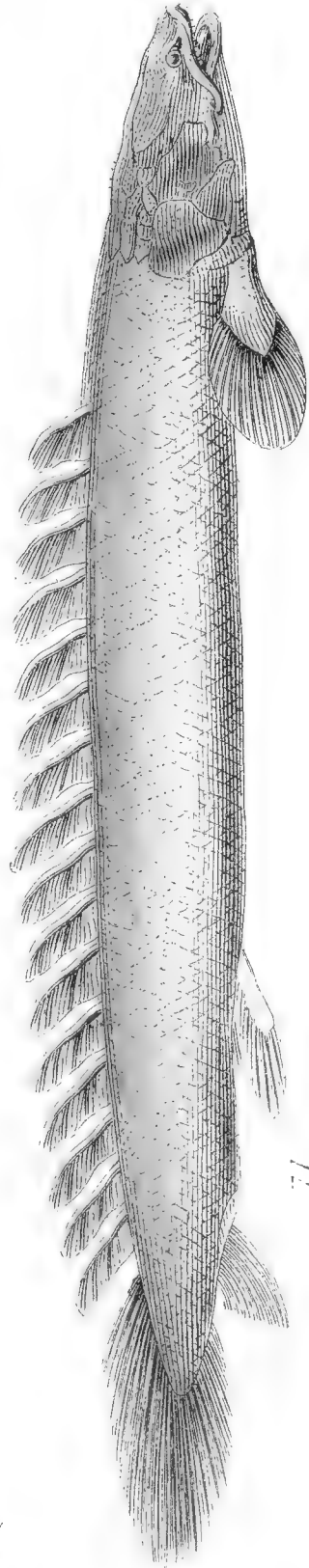
Families 69 Pegases  
70 Pipe-fishes  
71 Polypteres  
72 Sturgeons



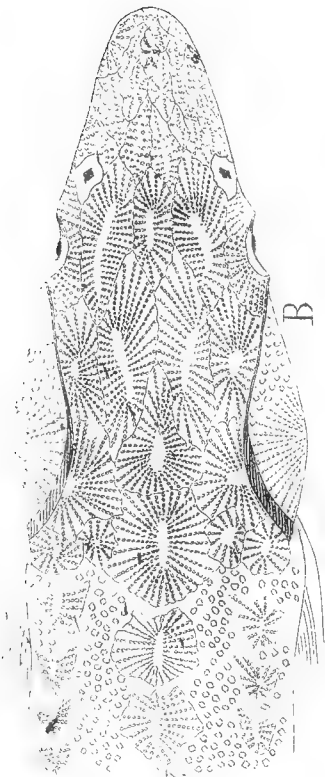
*Typhle Pipe-fish.*



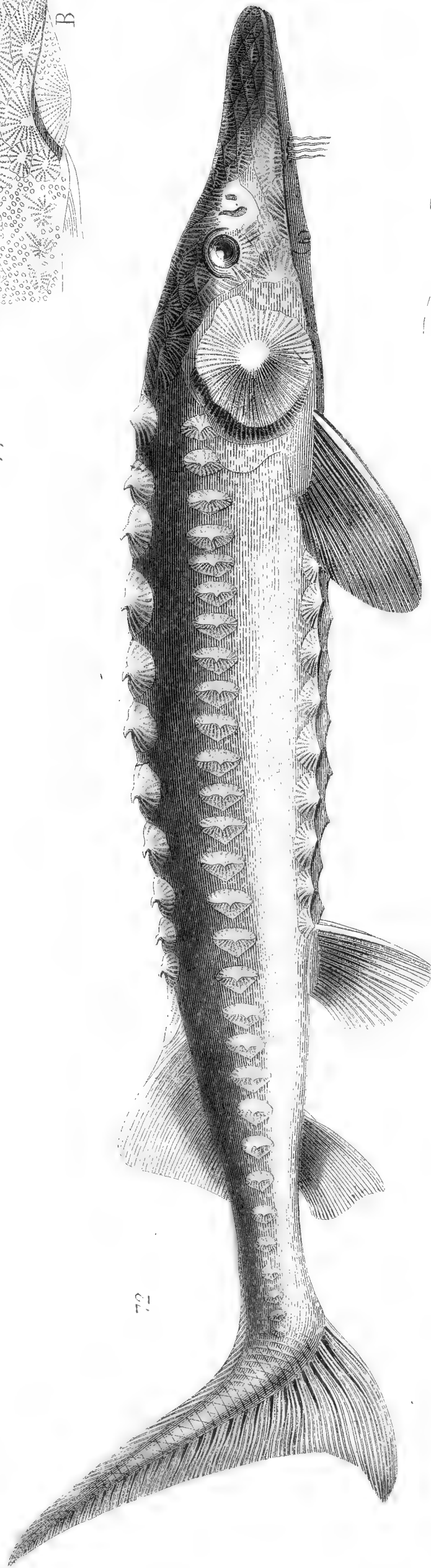
*Dragon-fish.*



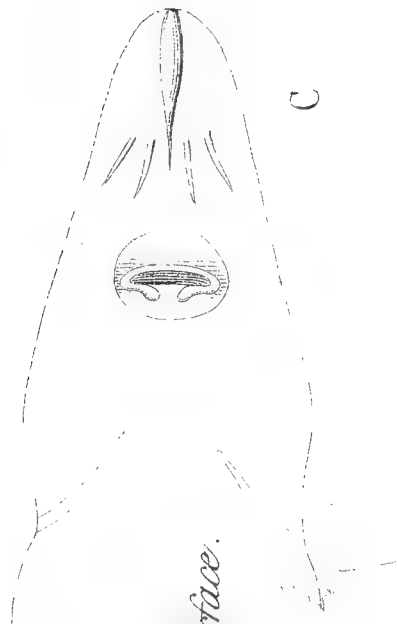
*Nilotic Polyptere.*



*Upper Surface.*



*The Common Sturgeon.*



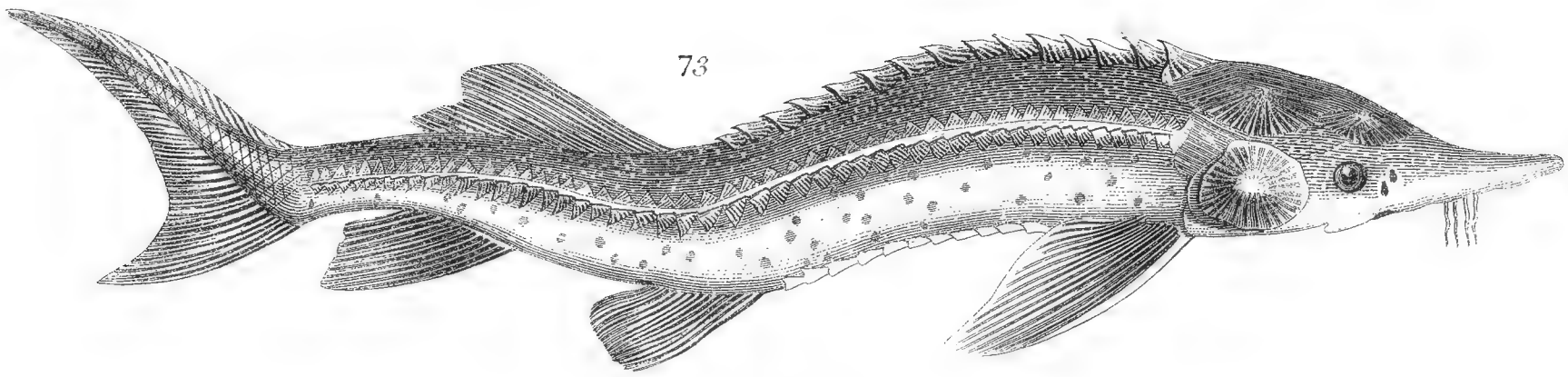
*Under Surface.*



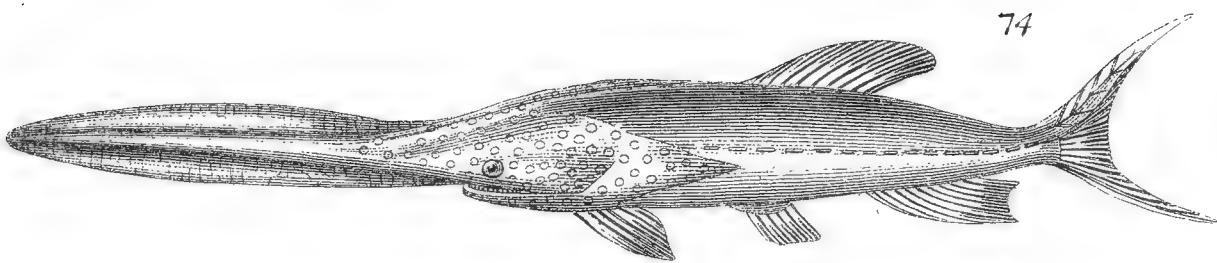


Orders Ganoids 73 74  
Holocephali 75 76

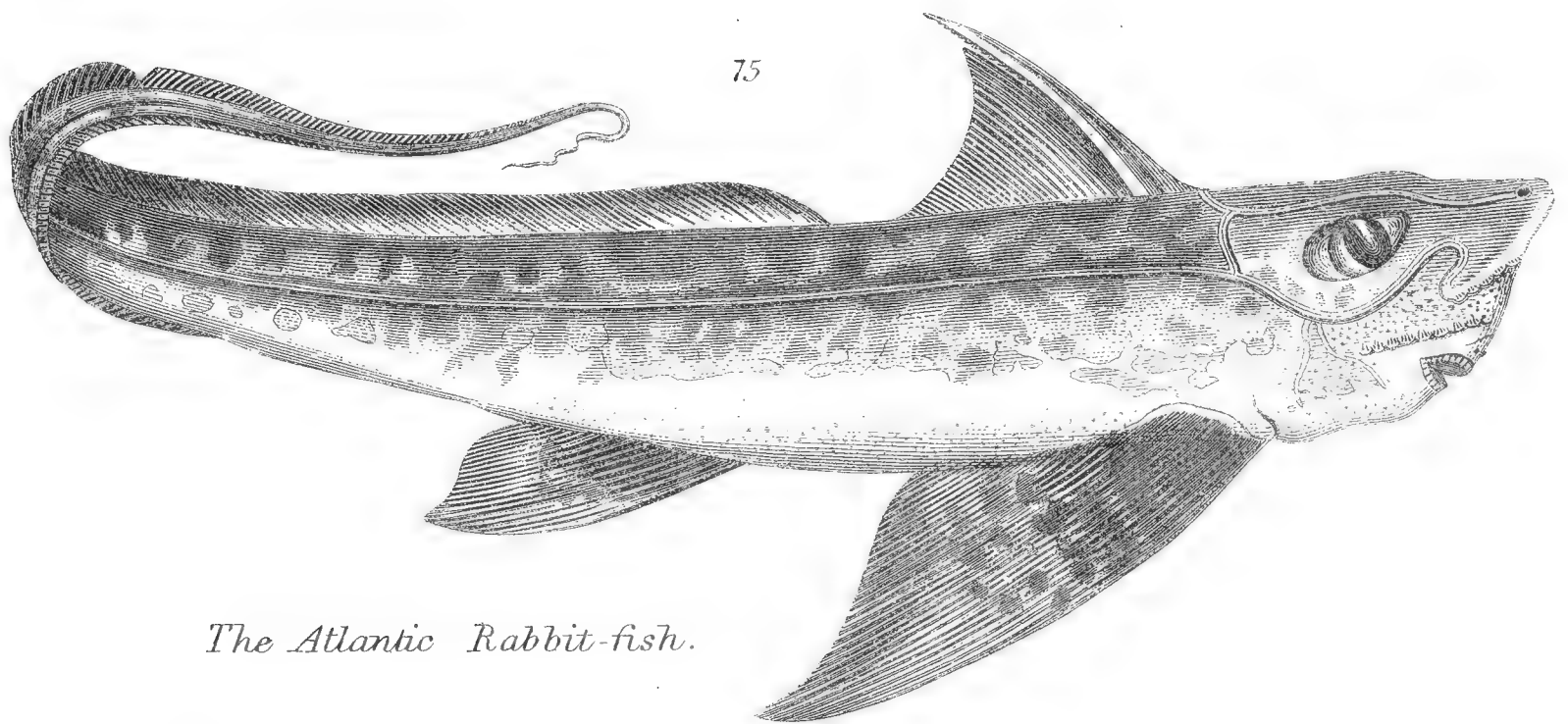
Families Sturgeons 73 74  
Chimeroids 75 76



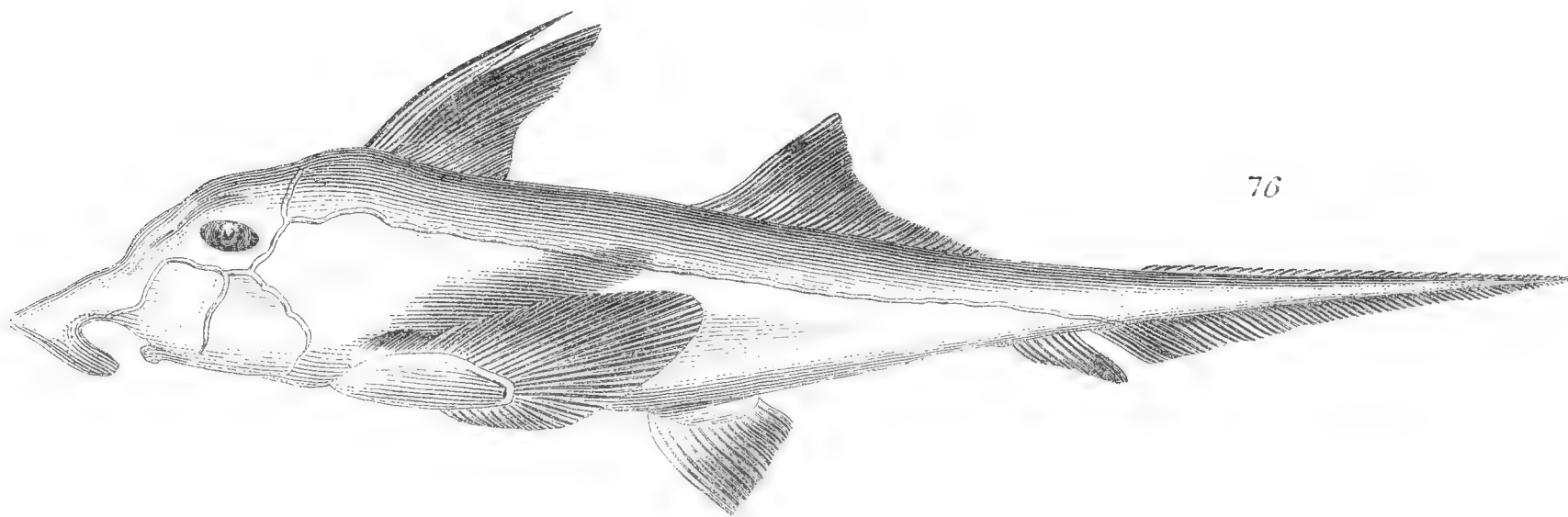
*The Sterlet.*



*The Paddle-fish.*



*The Atlantic Rabbit-fish.*



*The European Callorhynchus.*



# FISHES

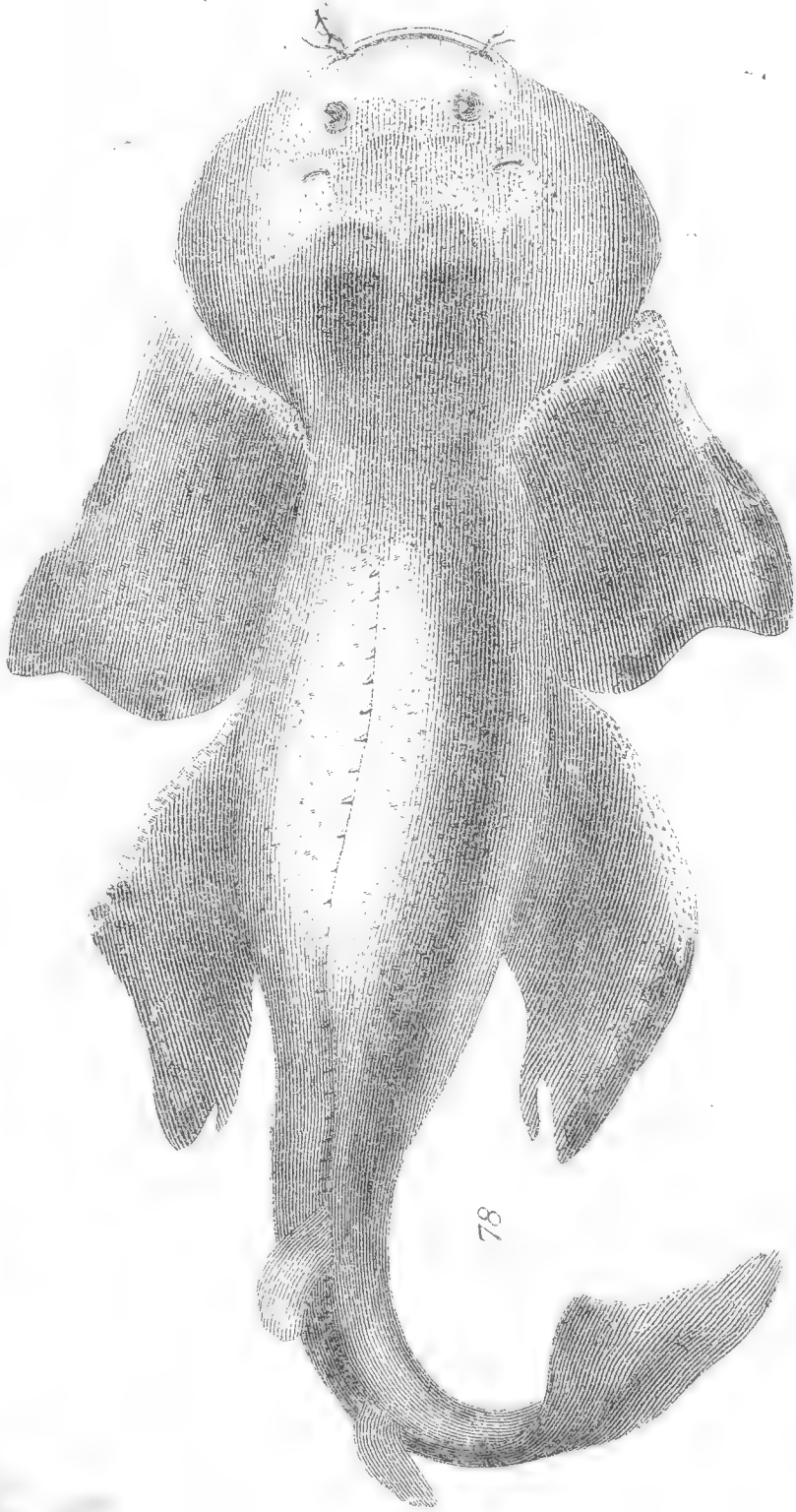
PLATE 16

Order Chondropterygians  
Selachians  
Rays

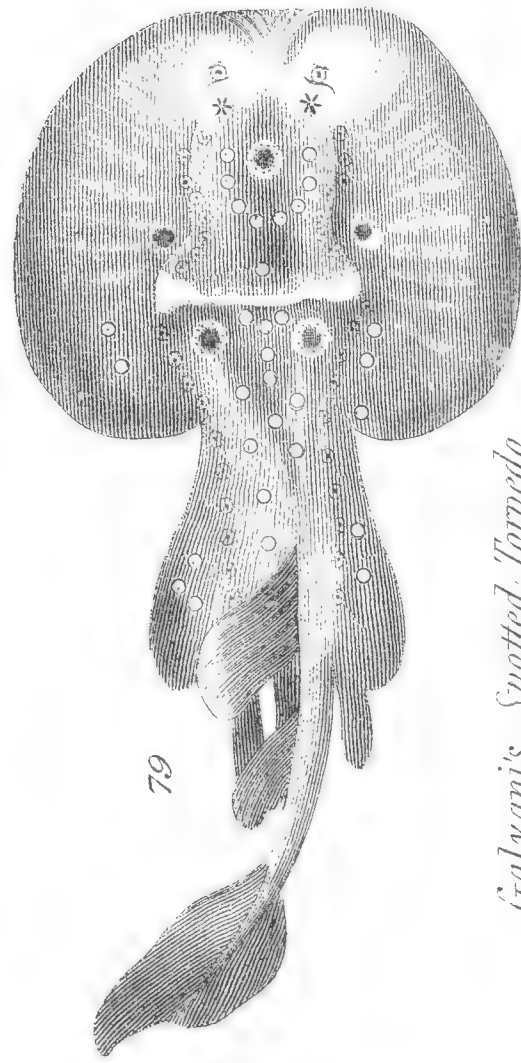
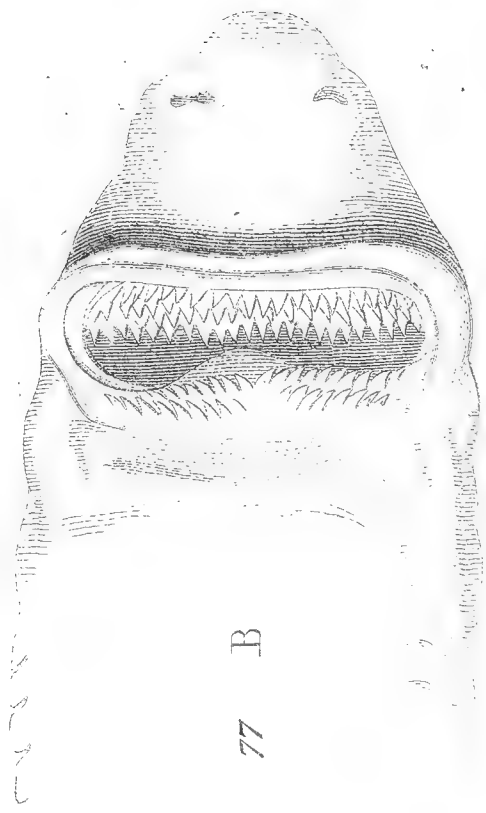
Families  
Carchariidæ 77  
Squatinidæ 78  
Torpedos 79  
Skates 80



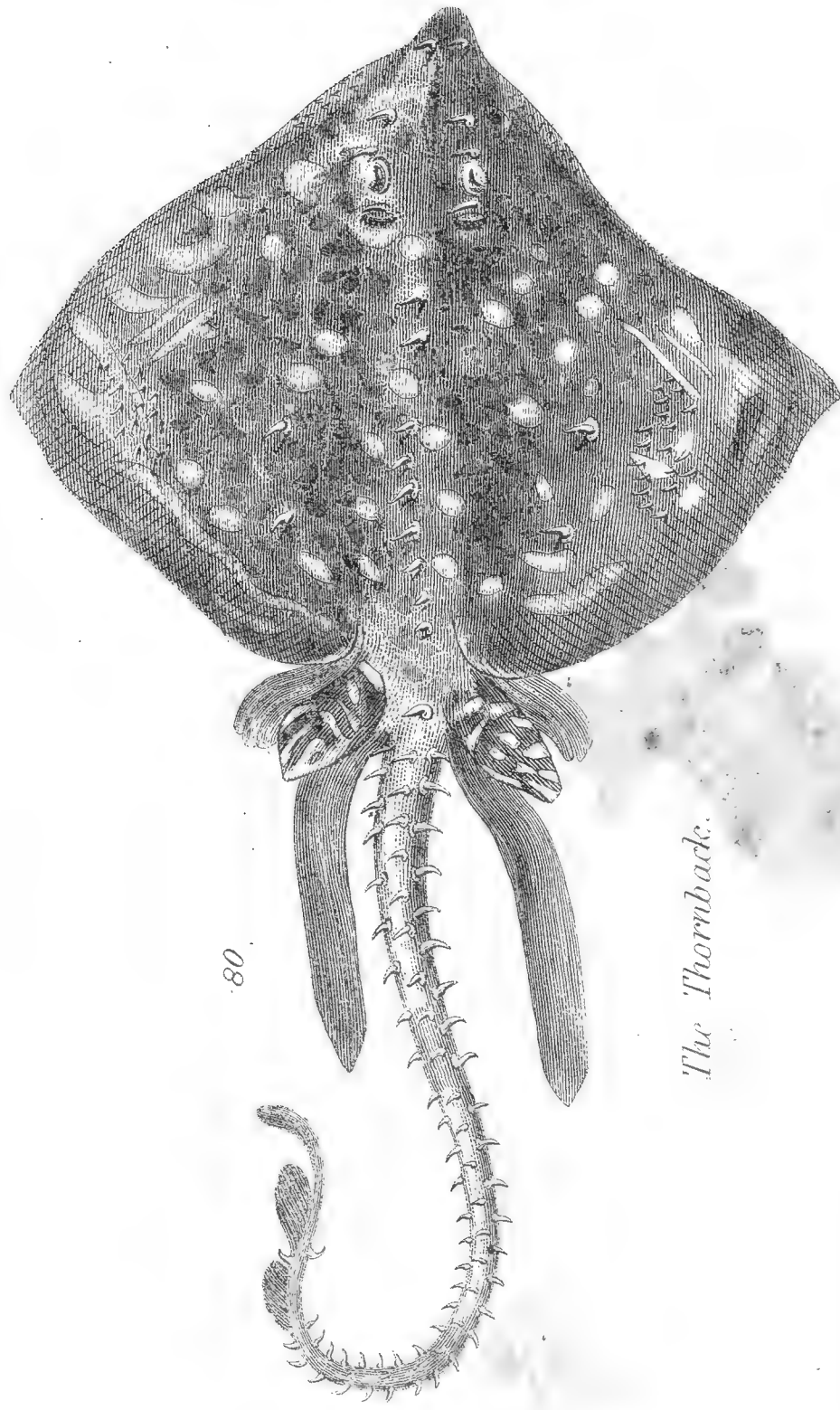
*Carcharias Guvier's Requiem.*



*The Angel Fish.*



*Galvani's Spotted Torpedo.*



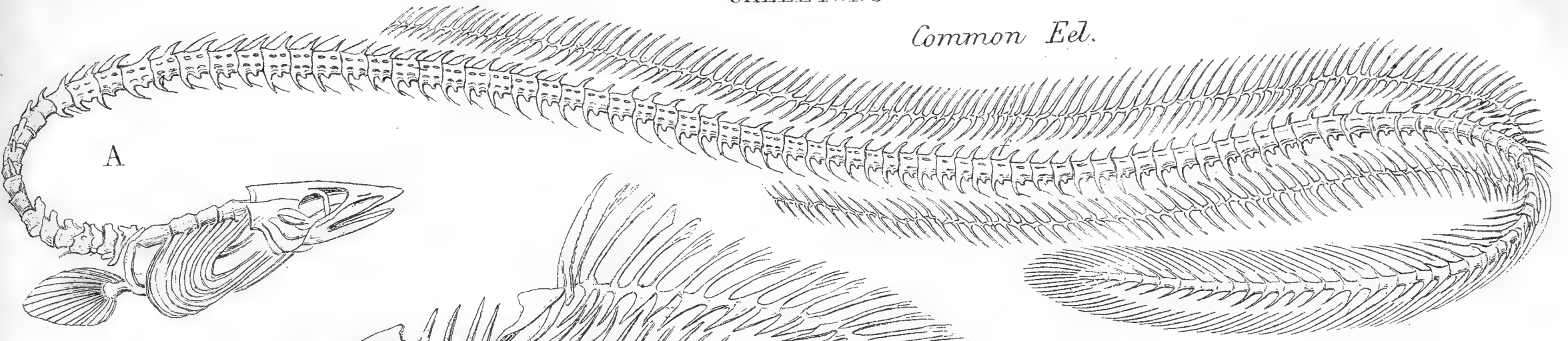
*The Thornback.*





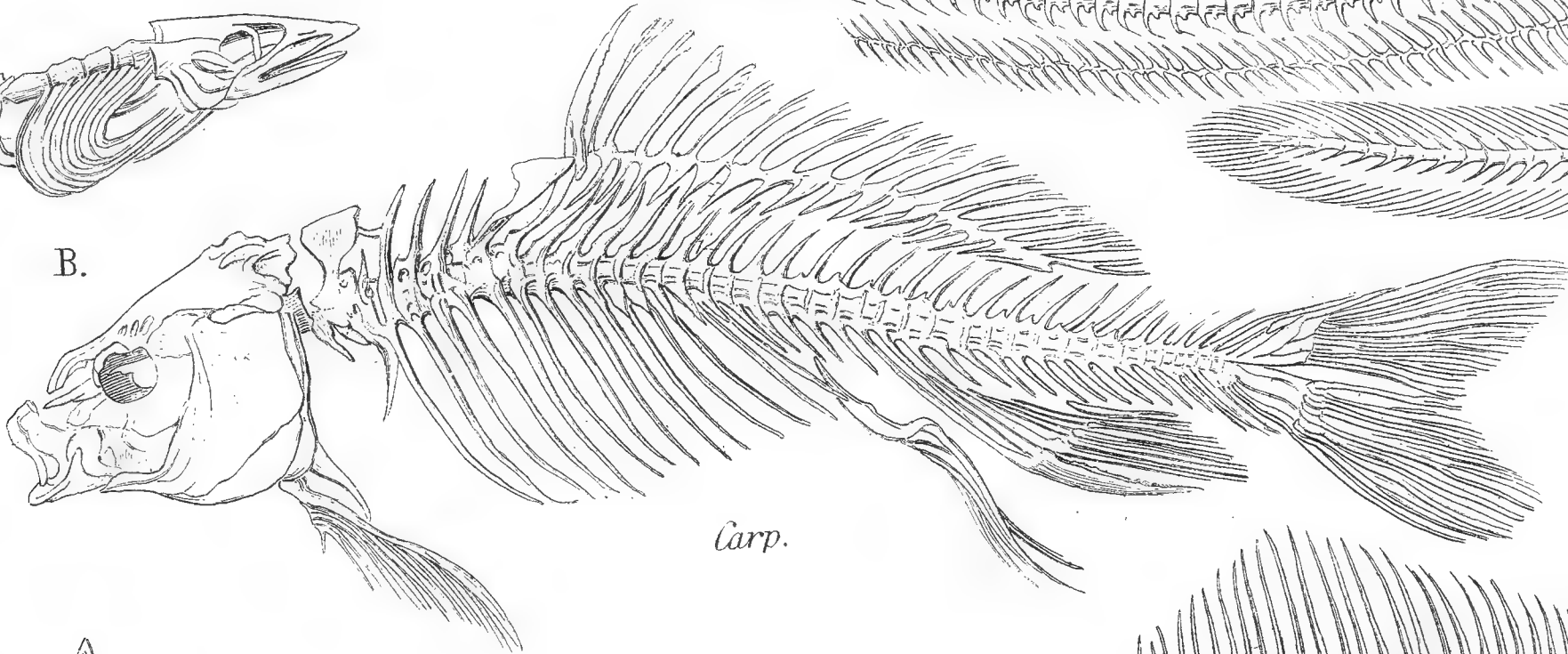
SKELETONS

*Common Eel.*



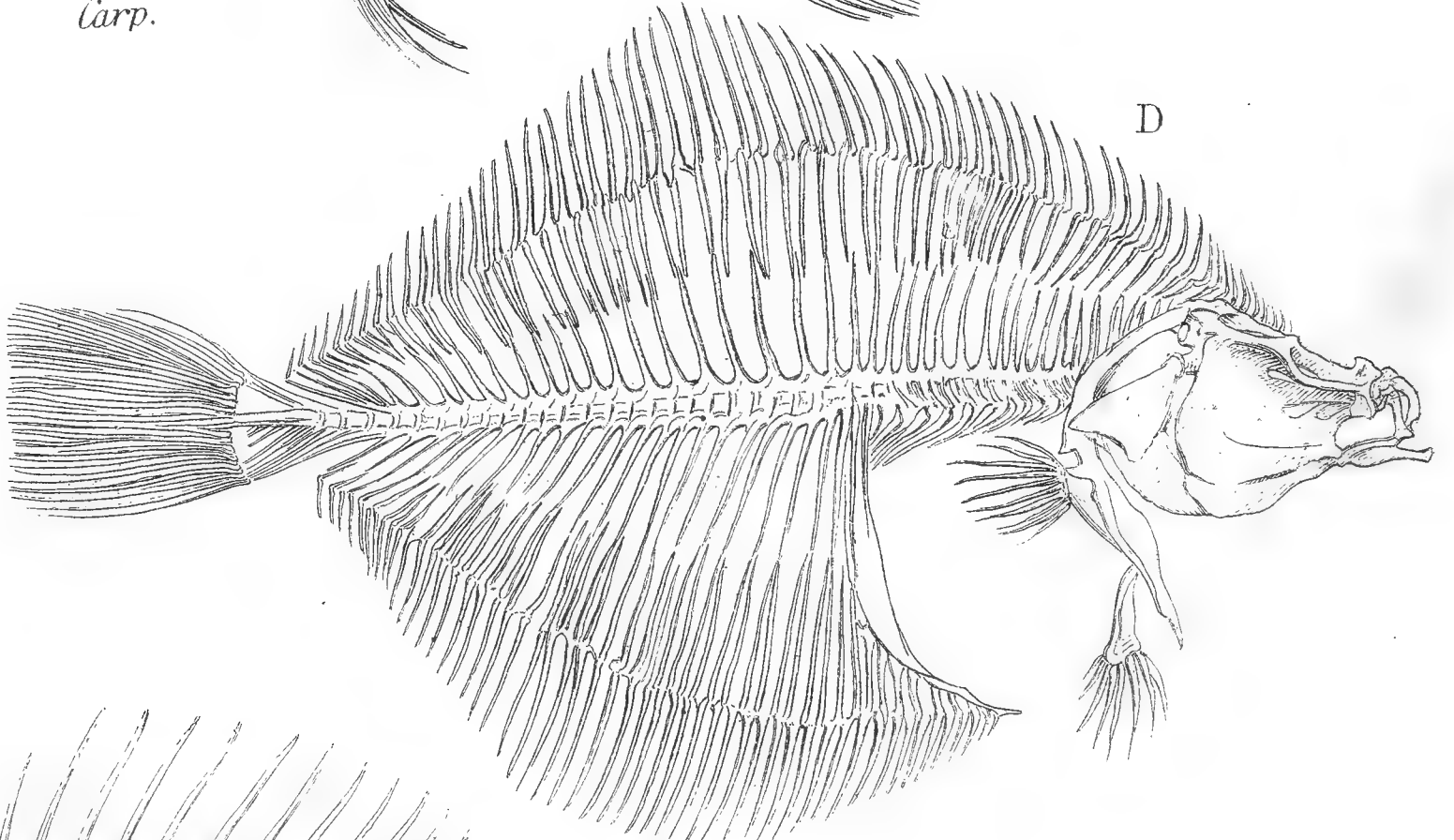
A

B.



*Carp.*

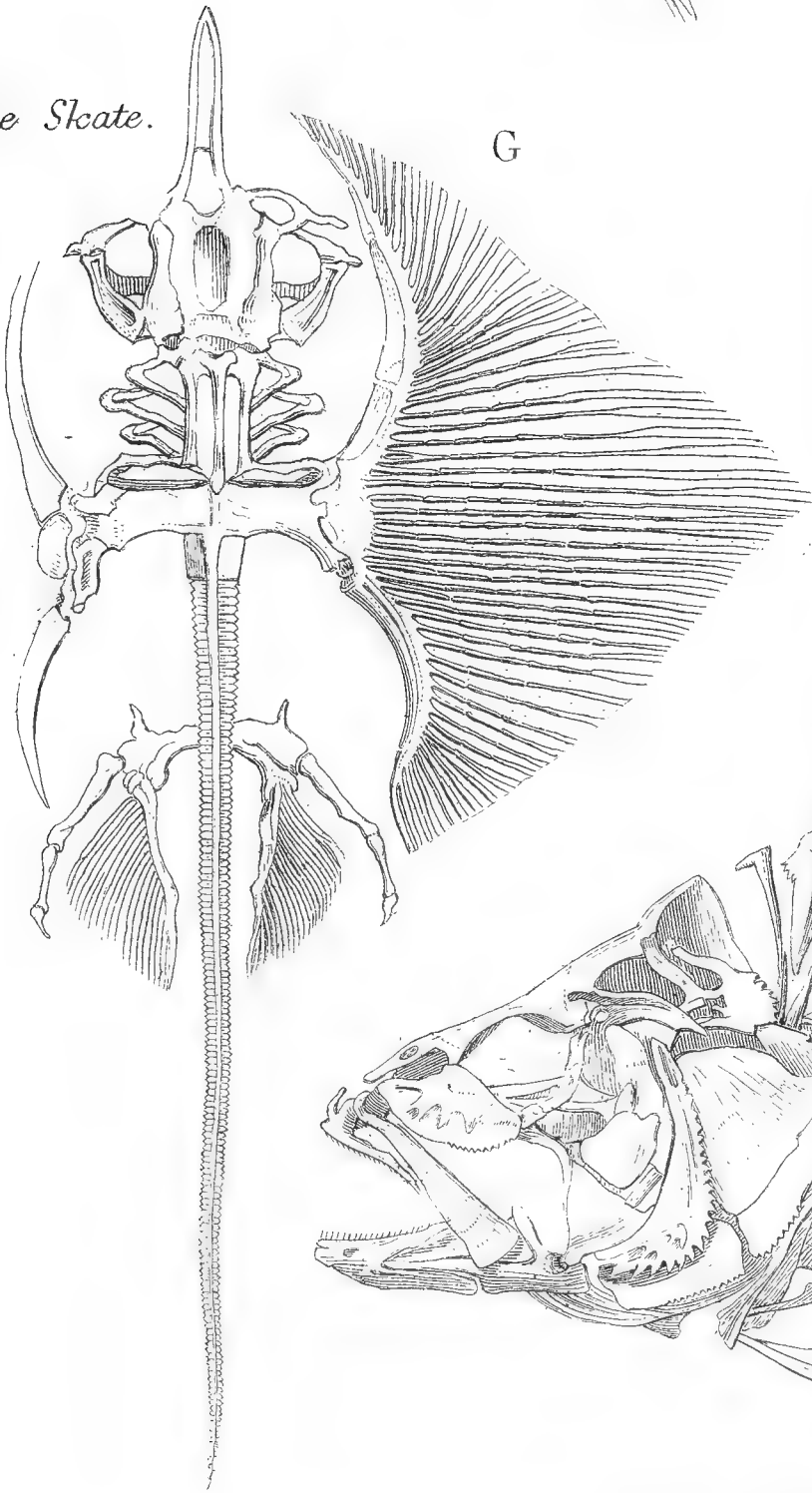
D



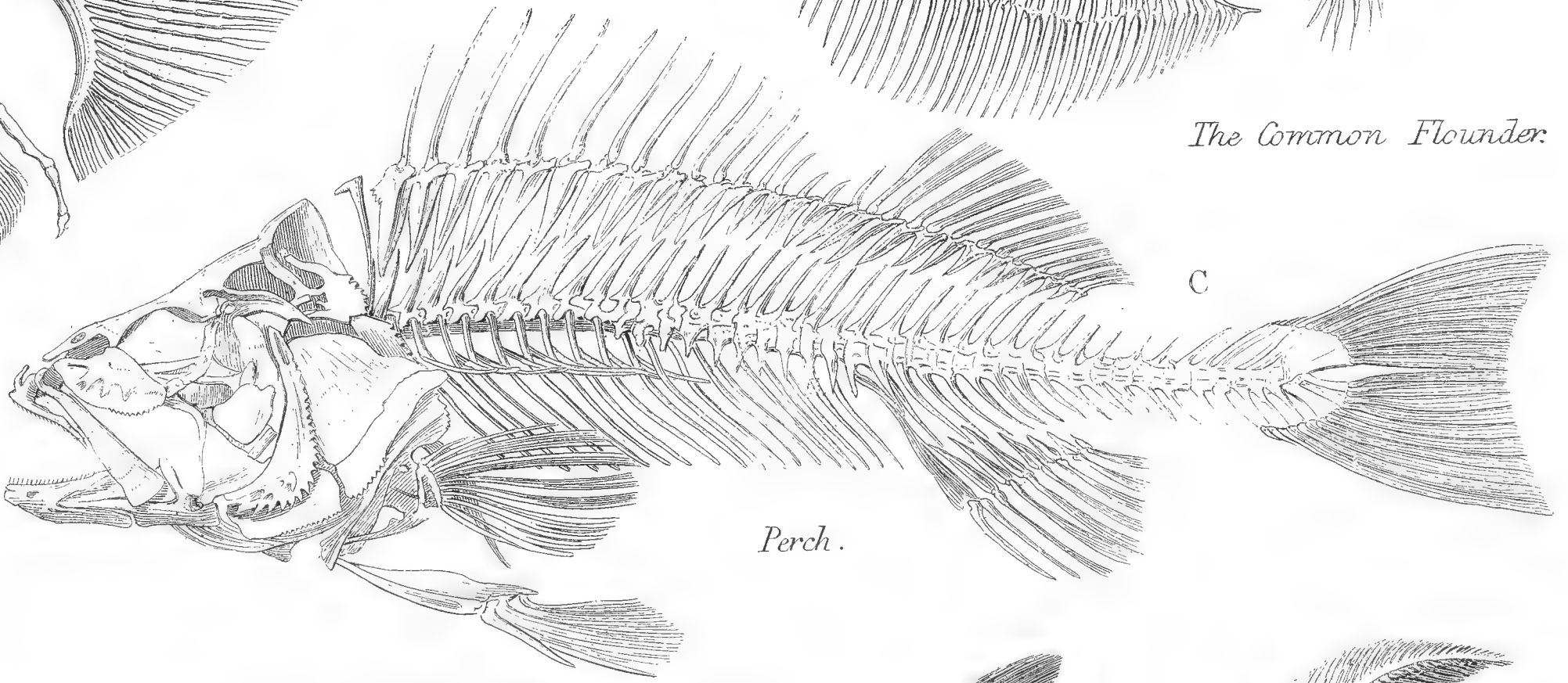
*The Common Flounder.*

G

*The Skate.*



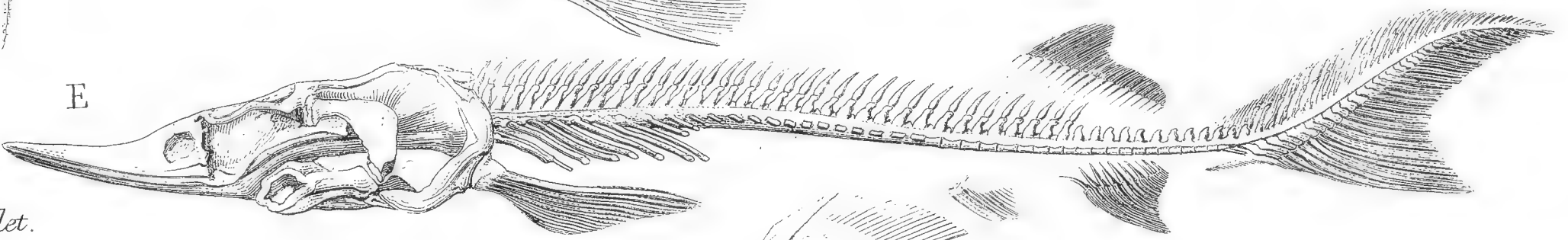
C



*Perch.*

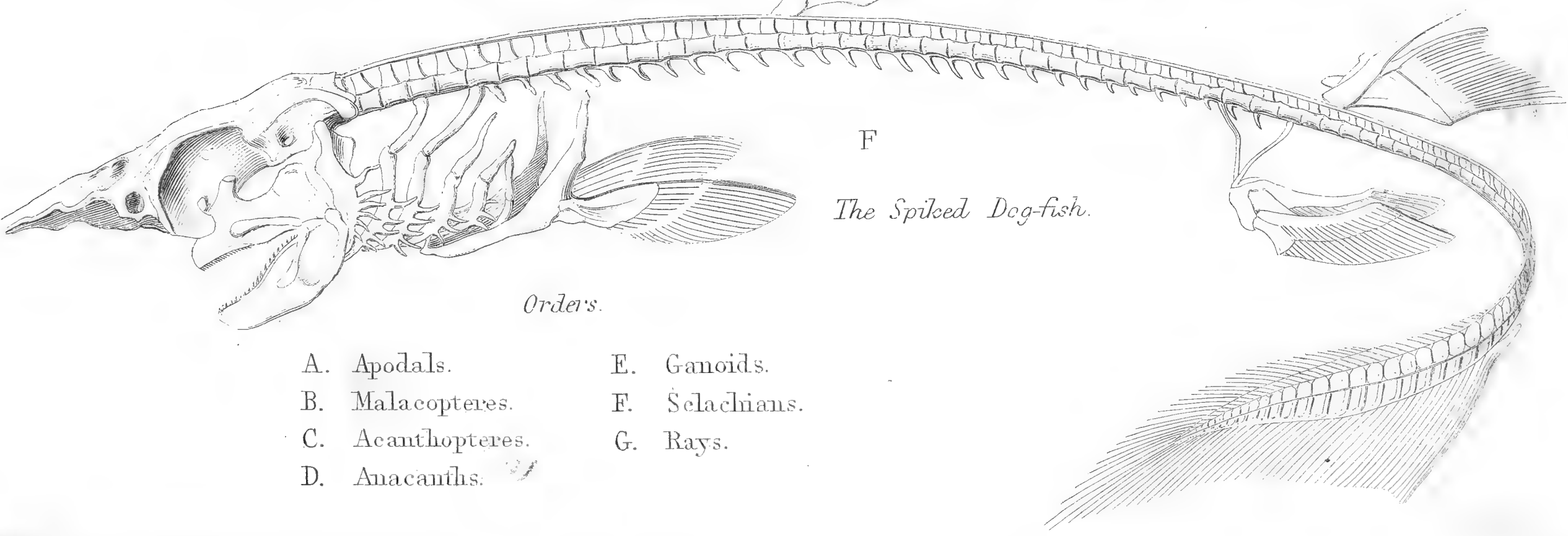
E

*The Sterlet.*



F

*The Spiked Dog-fish.*



*Orders.*

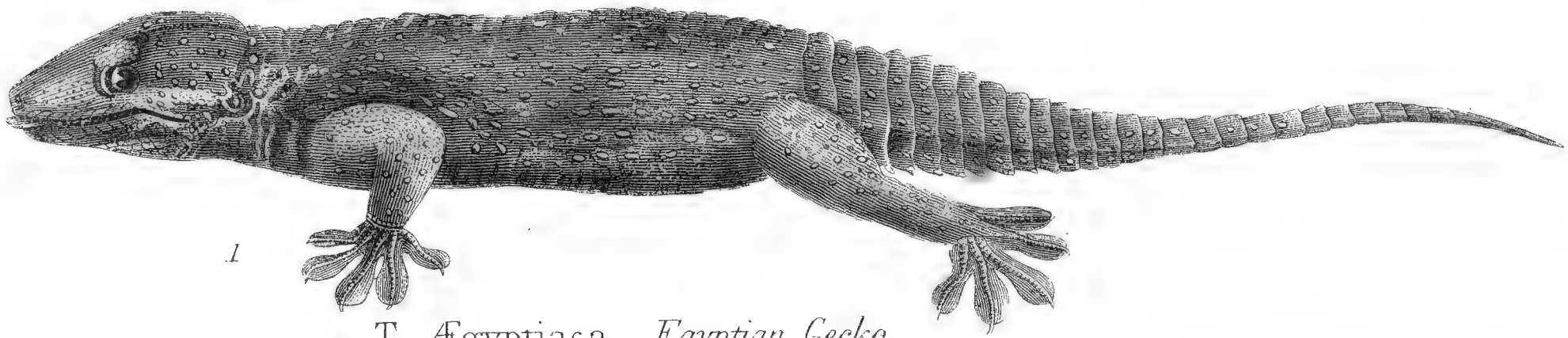
- |                   |                |
|-------------------|----------------|
| A. Apodals.       | E. Ganoids.    |
| B. Malacopteres.  | F. Selachians. |
| C. Acanthopteres. | G. Rays.       |
| D. Anacanth.      |                |



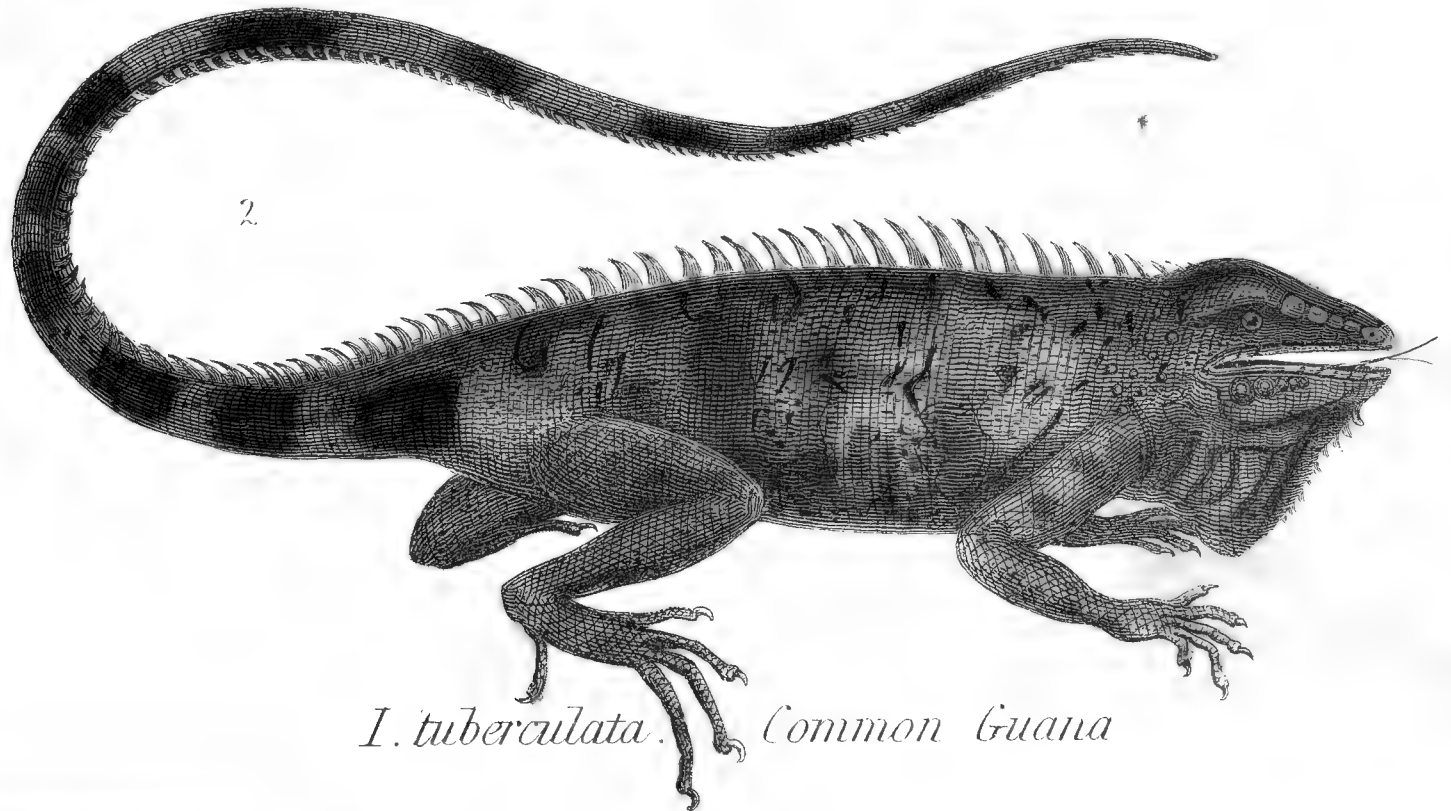
Order, Sauria. /Lizards/

Sub-order Pachyglossæ. /Thick tongues/

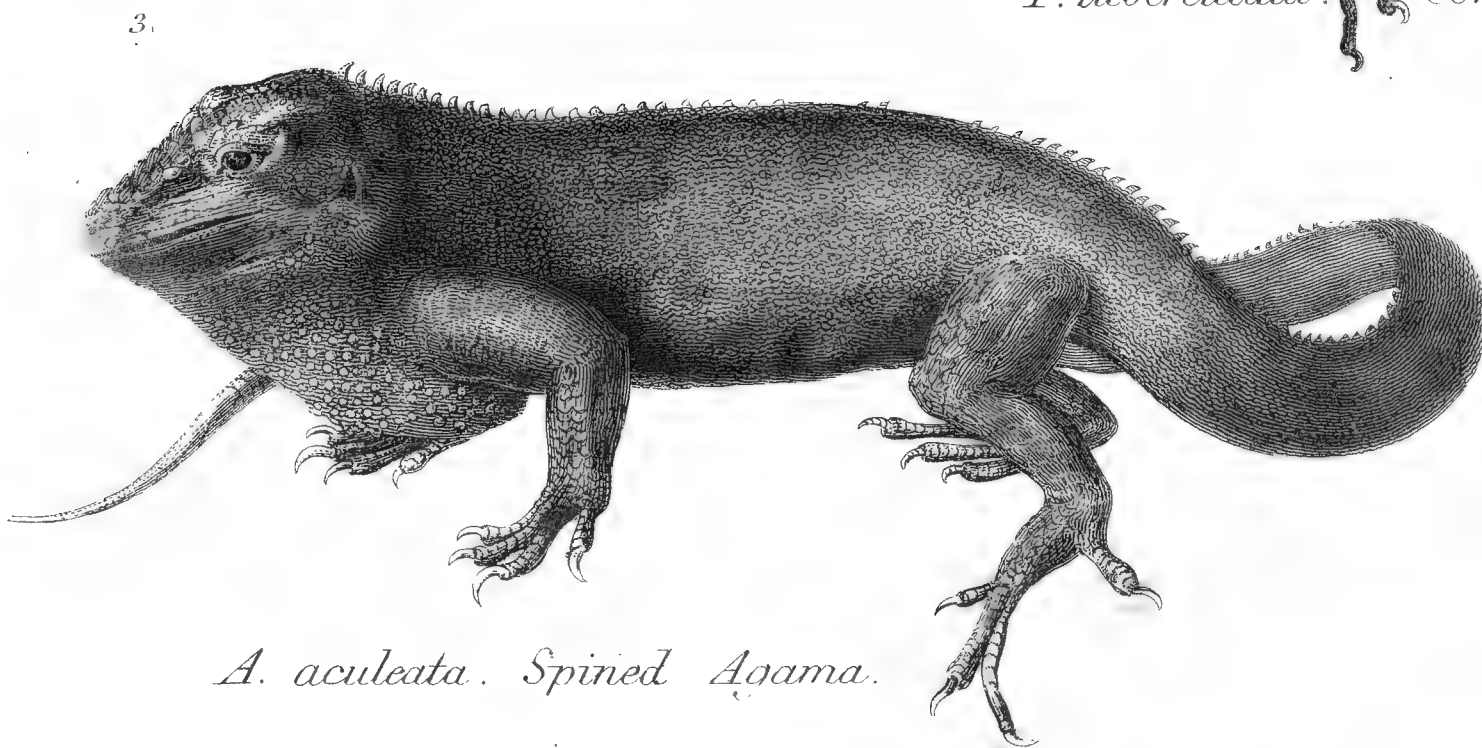
Genera, Platydactylus Iguana, Agama, Draco,



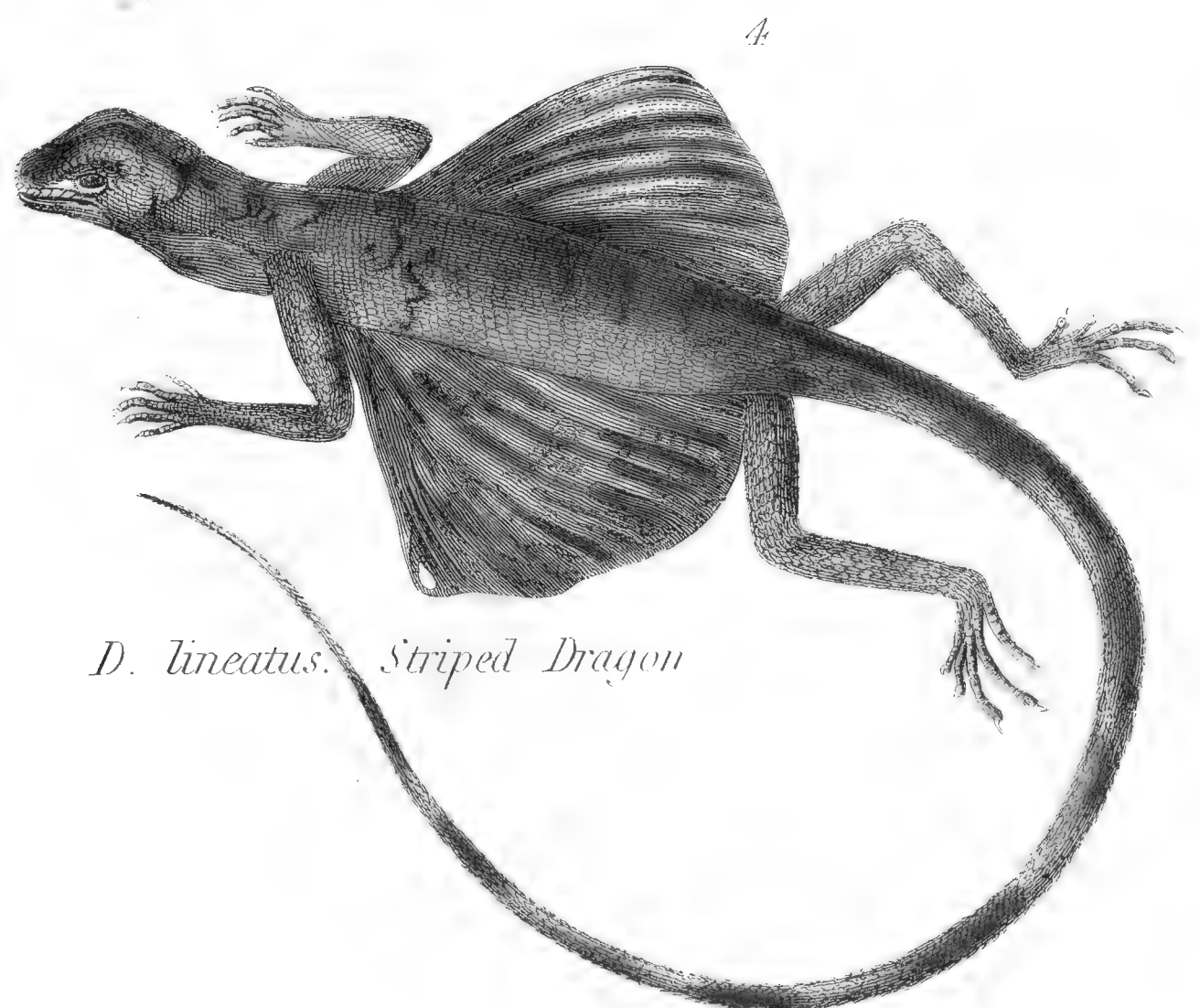
T. Ægyptiaca — Egyptian Gecko.



I. tuberculata. Common Guana



A. aculeata. Spined Agama.



D. lineatus. Striped Dragon

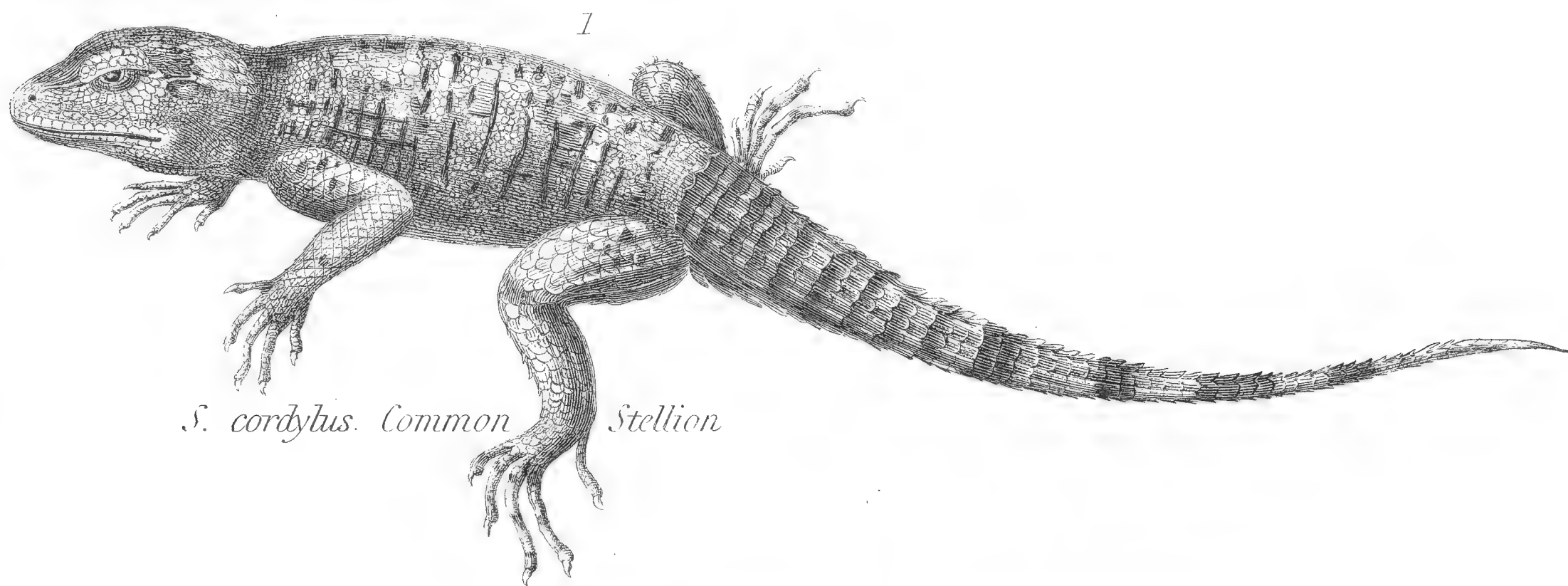




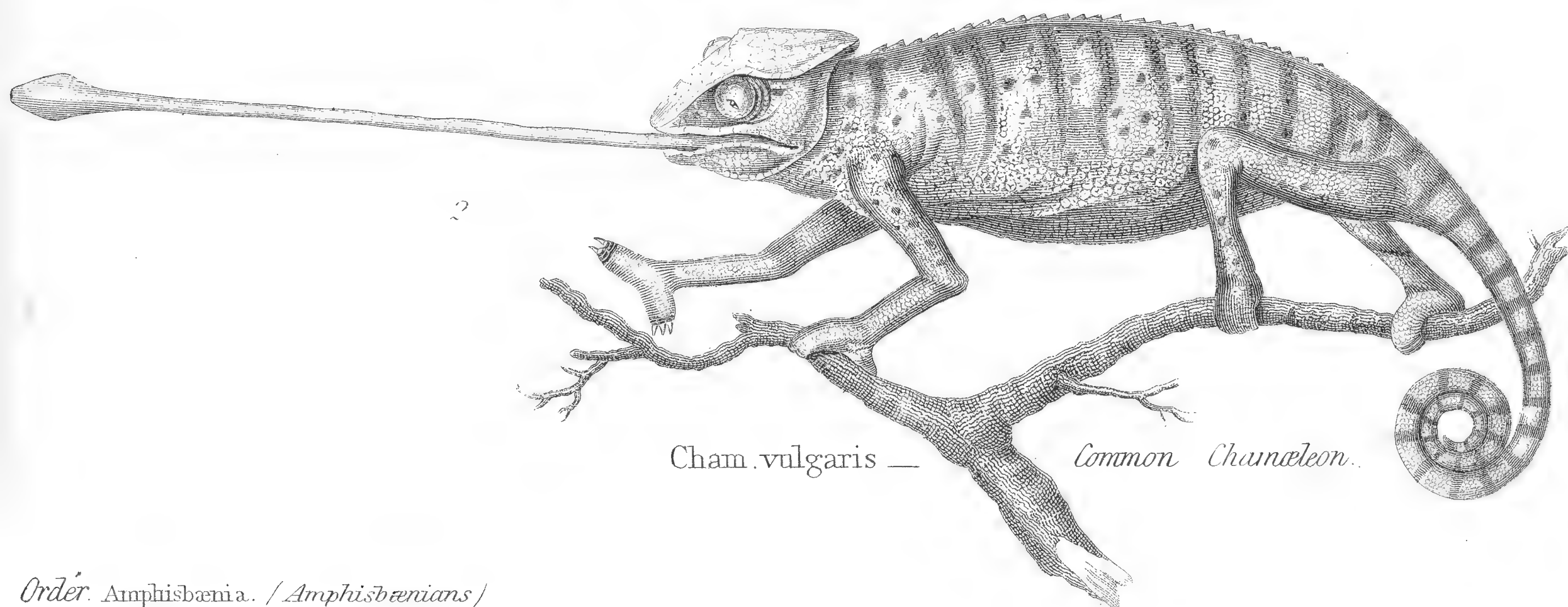
Order, Sauria. /Lizards/

Sub-order Pachyglossæ. /Thick tongues/

Gen. Stellio, Chamæleo, Amphisbænia Chirotes.

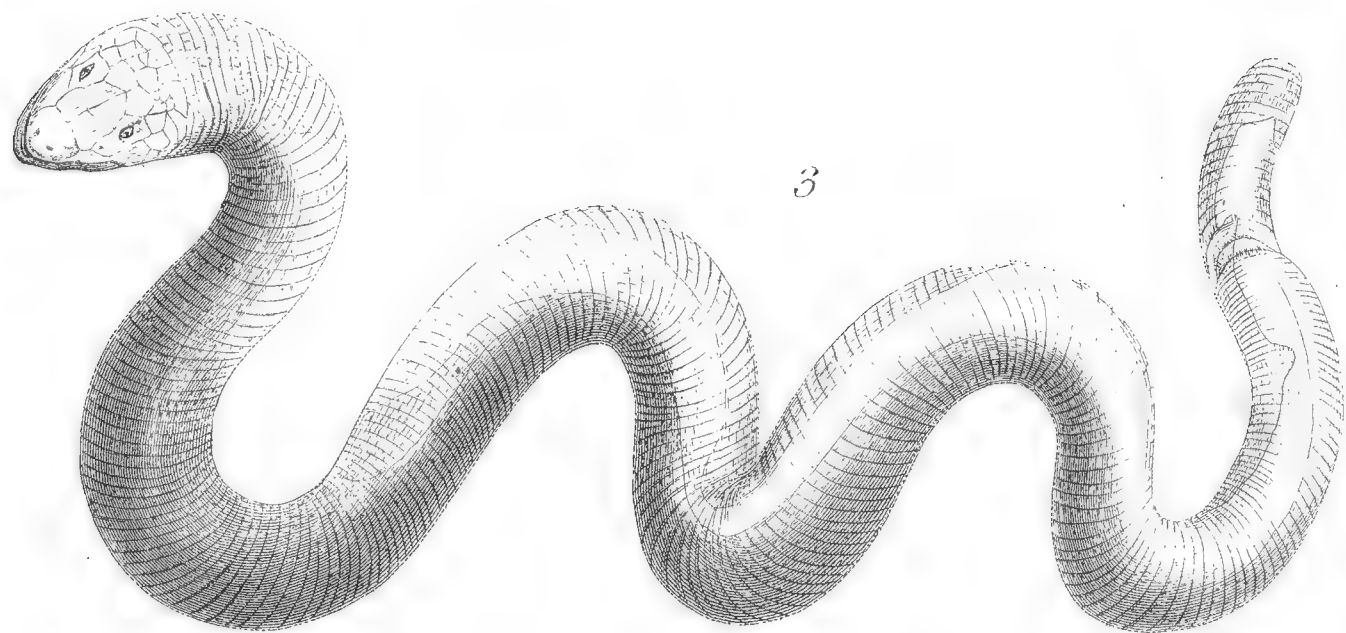


*S. cordylus*. Common Stellion

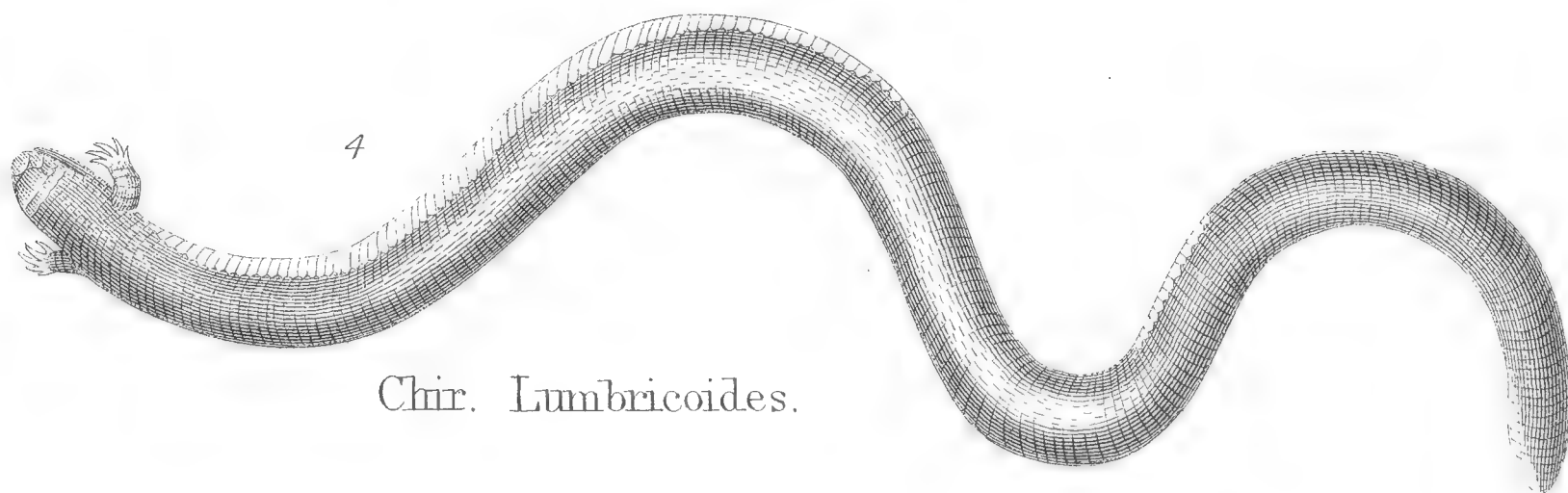


*Cham. vulgaris* — Common Chamæleon.

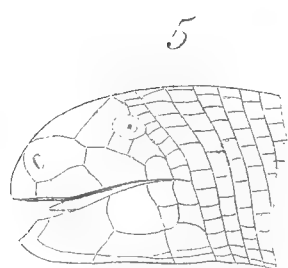
Order. Amphisbænia. /Amphisbænians/



*Amph.<sup>a</sup> alba*. White Amphisbæna.



*Chir. Lumbricoides*.



Head of *Ch. Lumbricoides*.

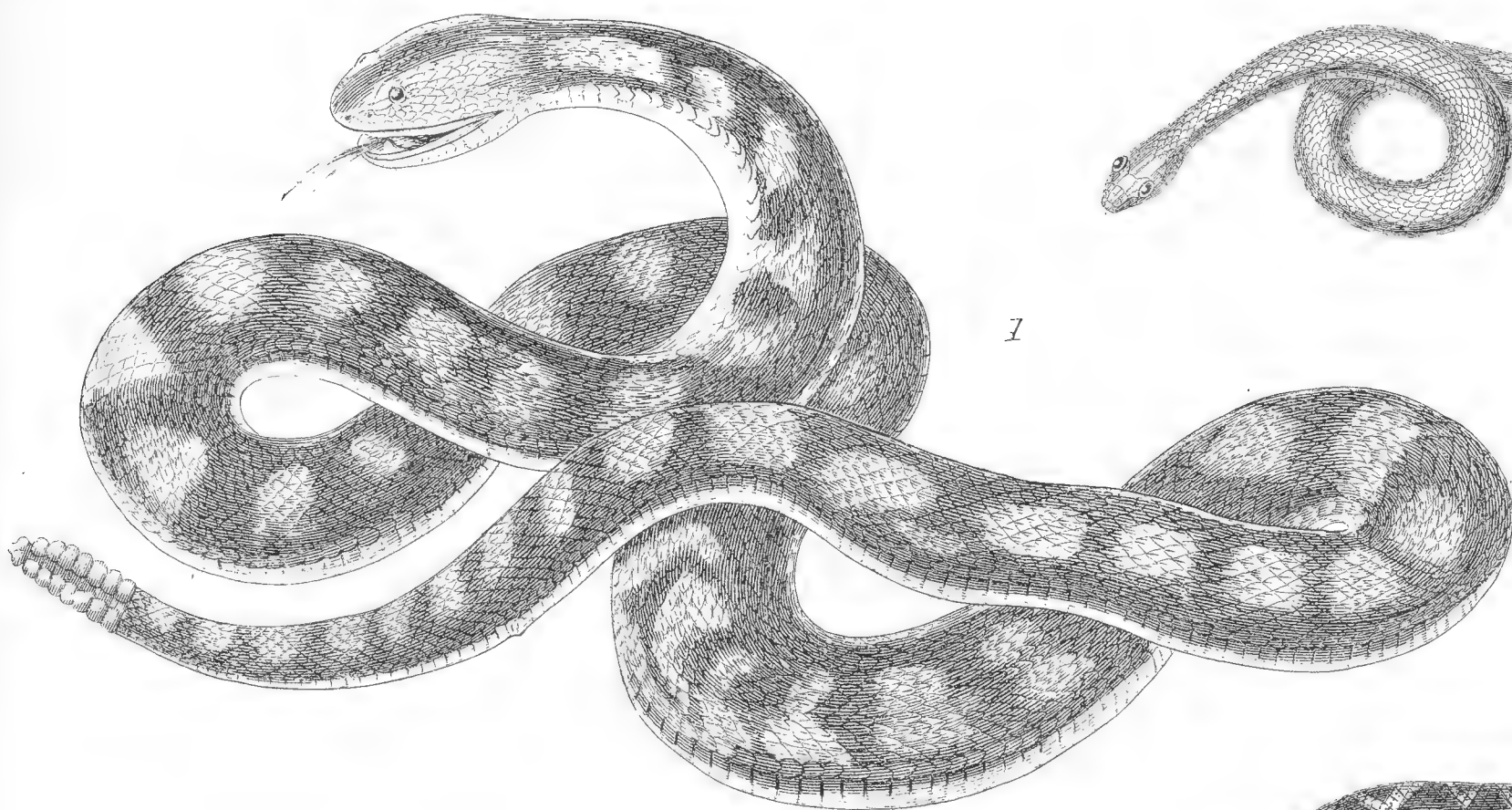


Order, Ophidia. / Snakes /

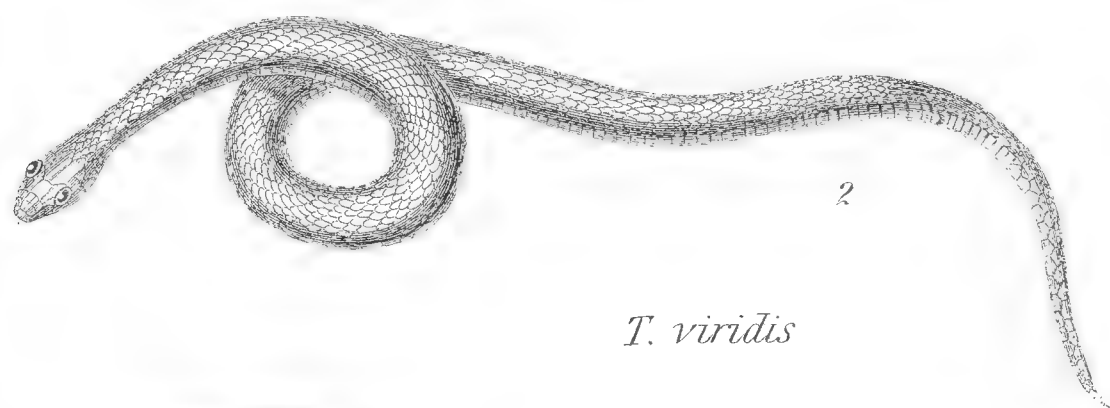
Sub-order Viperinæ. / Viperine Snakes /

Genera. Uropsophus, Trimesurus, Cerastes, Pelias, Pelamys, Acrochordus.

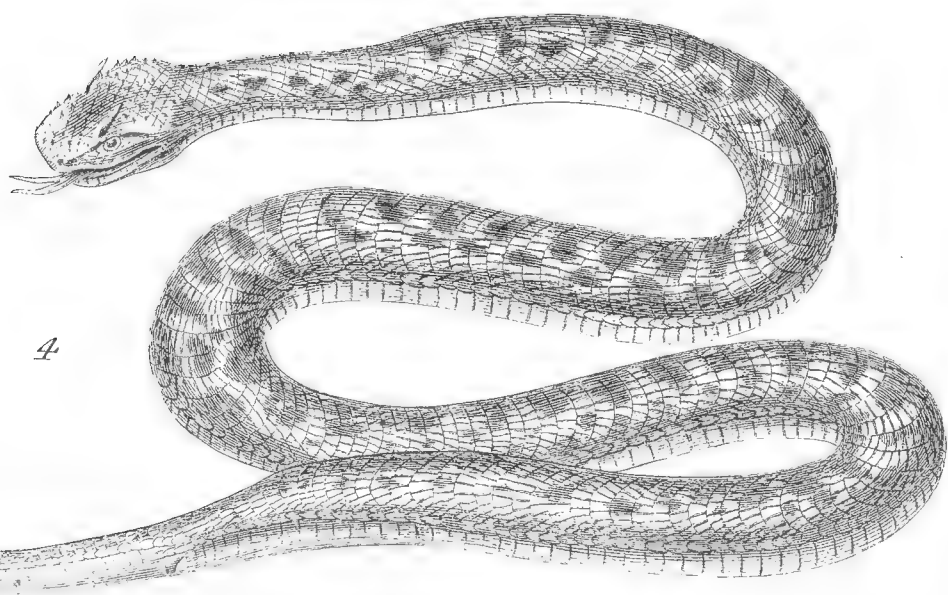
5 6 Colubrinæ / Colubrine Snakes /



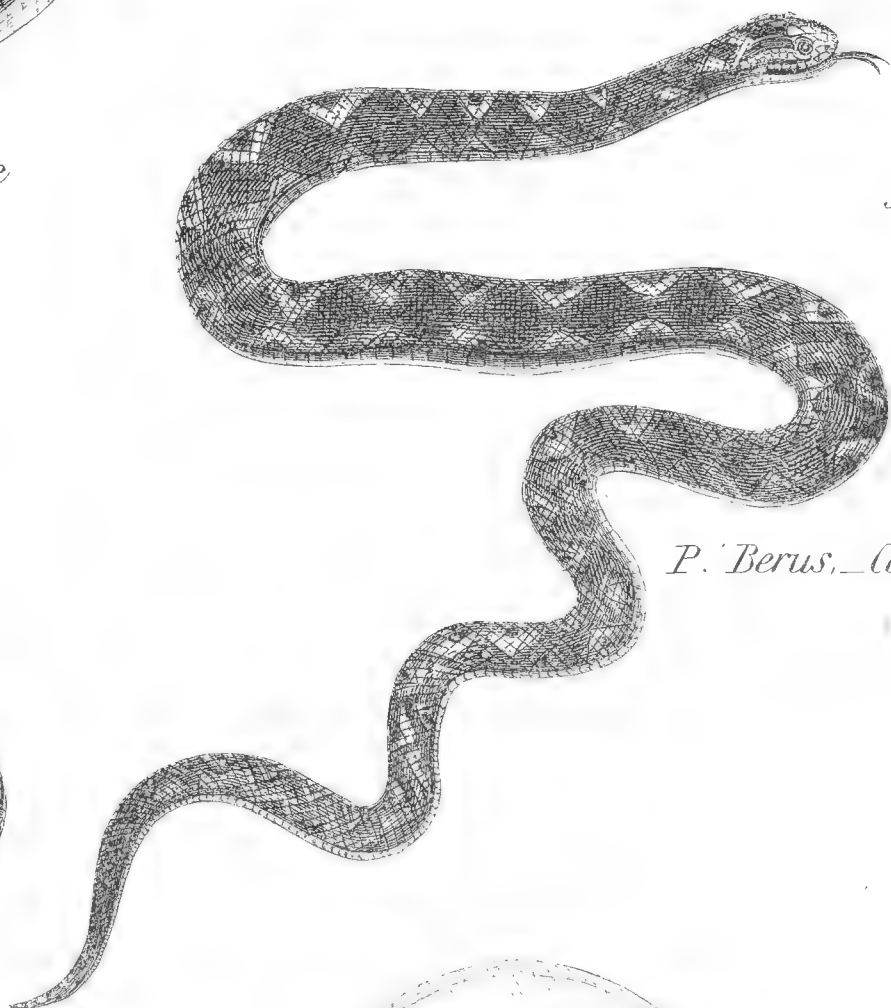
*U. durissus*.—Banded Rattle Snake



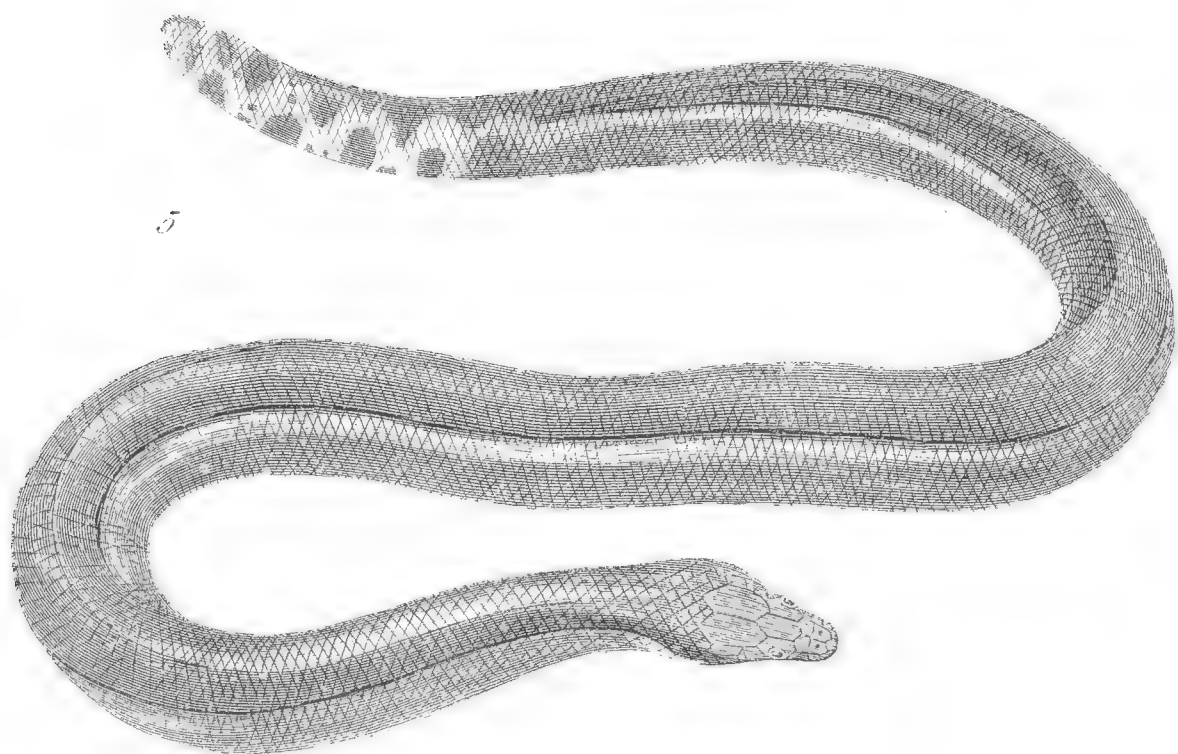
*T. viridis*



*Cera. Hasselquisti*



*P. Berus*.—Common Viper



*Pel. bicolor*.—Blackbacked Sea Snake



*Acro Javanicus*.

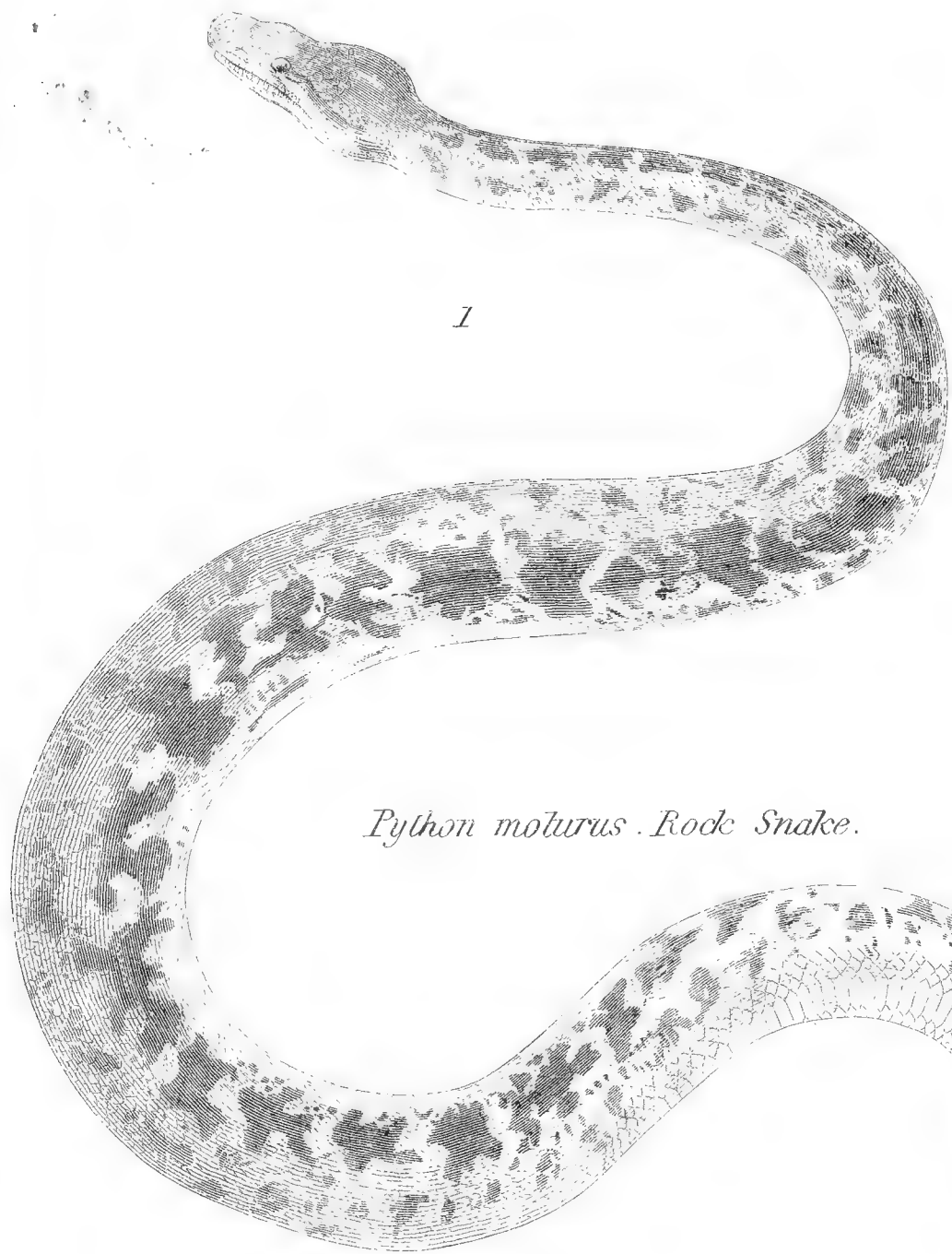




Order, Ophidia. / Snakes /

Genera, Python, Boa, Tortrix, Bungarus, Naja

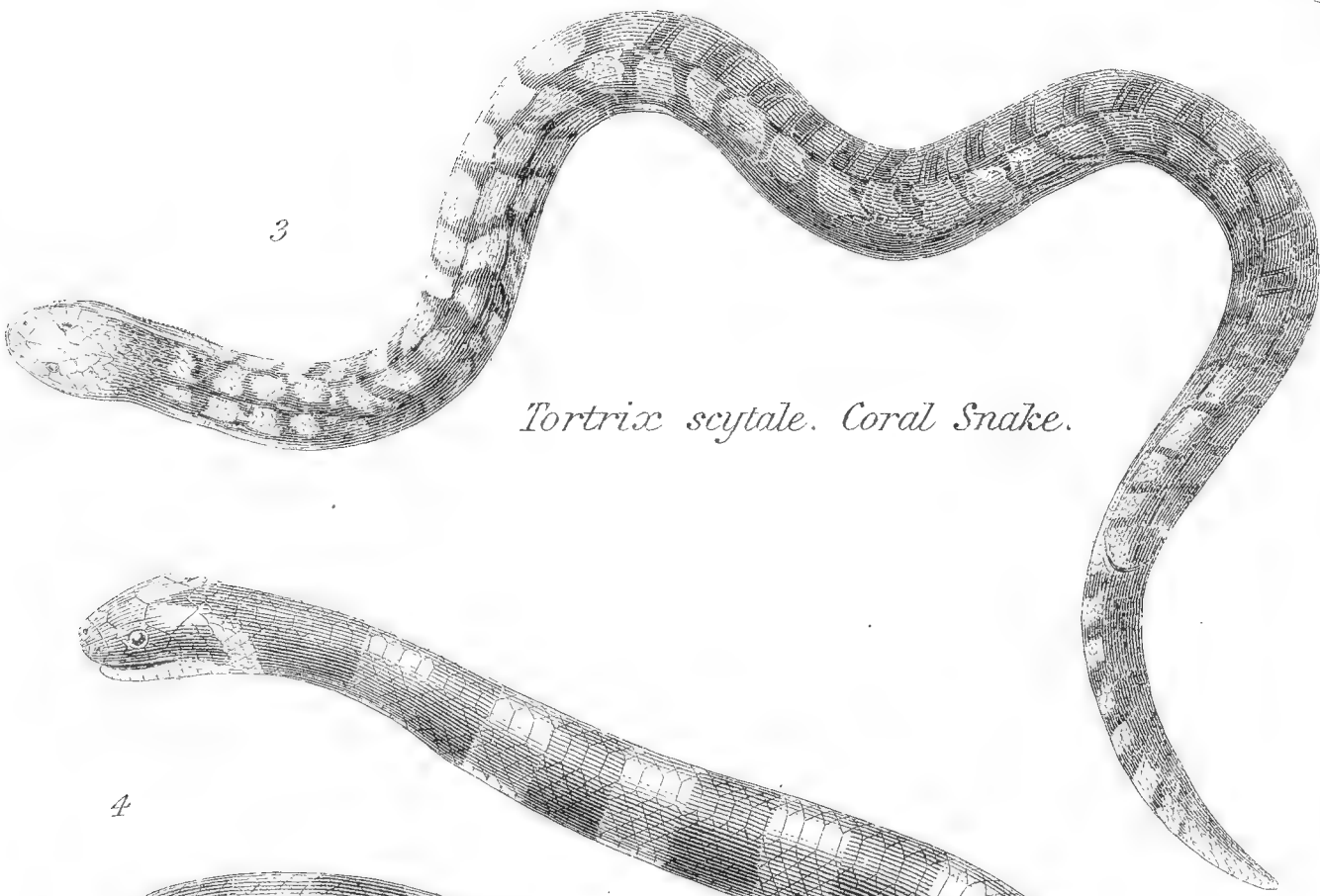
Sub-order, Colubrinæ. / Colubrine Snakes /



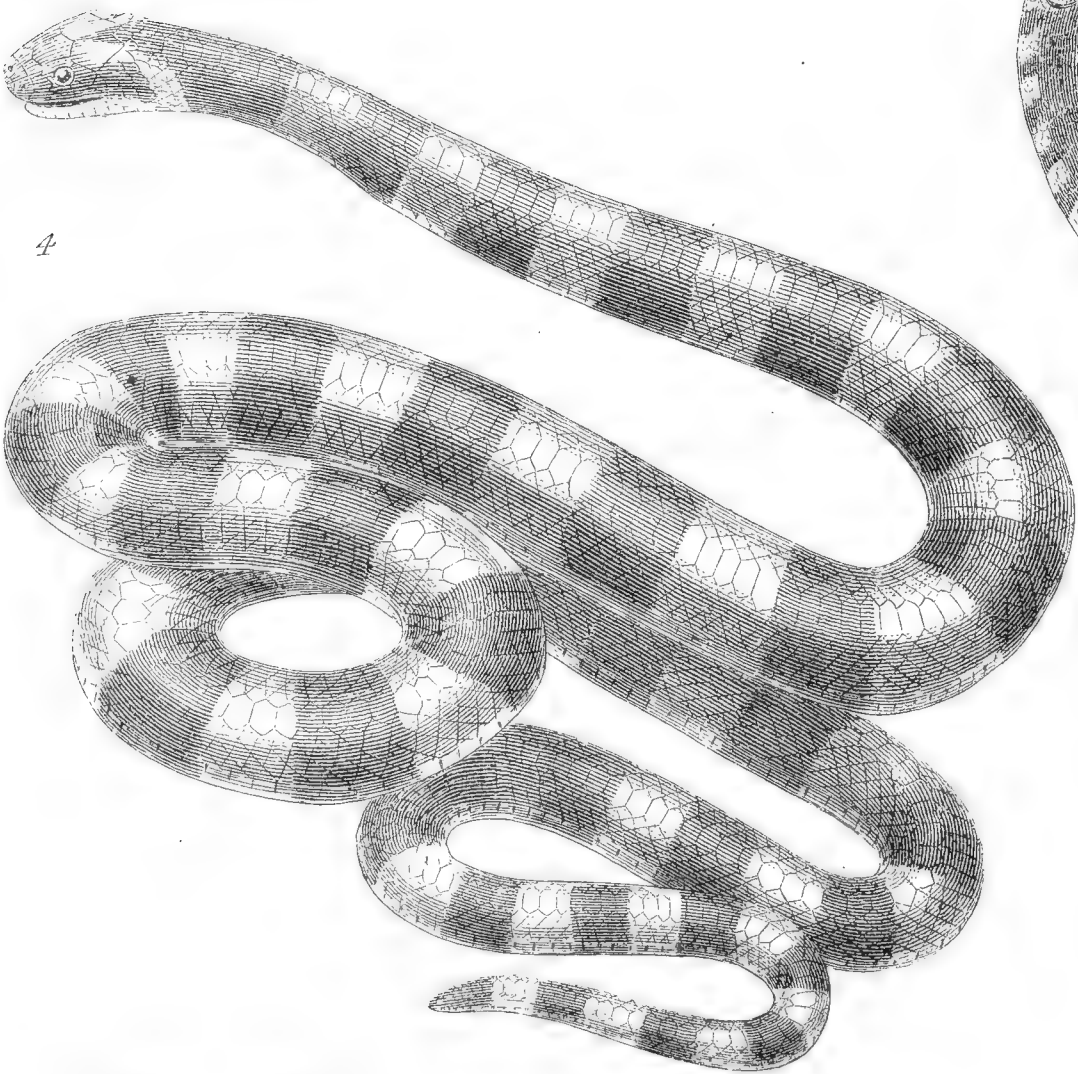
*Python molurus. Rope Snake.*



*Boa constrictor*



*Tortrix scytale. Coral Snake.*



*Bungarus fasciatus.*



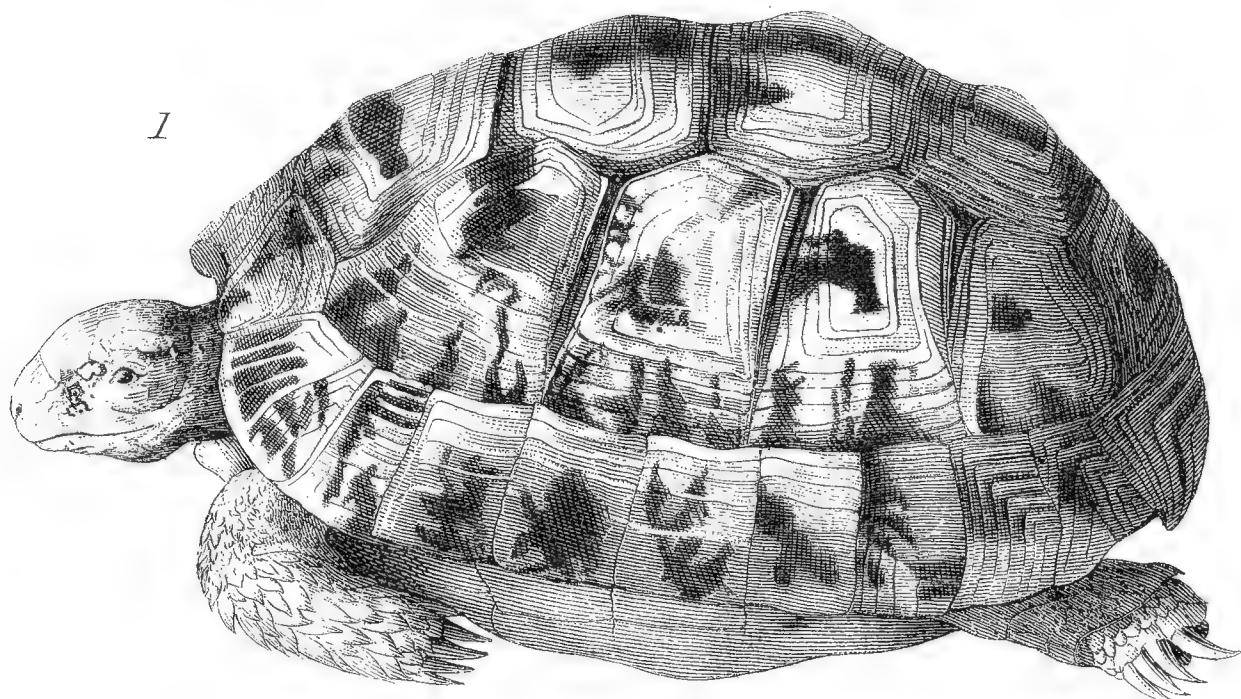
*N. tripudians. Spectacled Snake*



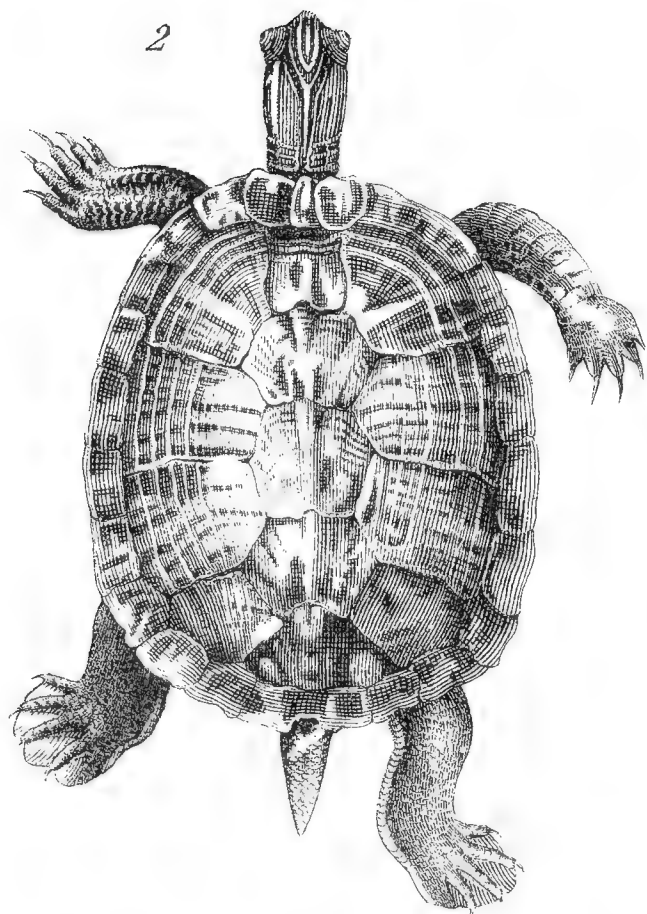


Order Chelonia: / Tortoises & Turtles /

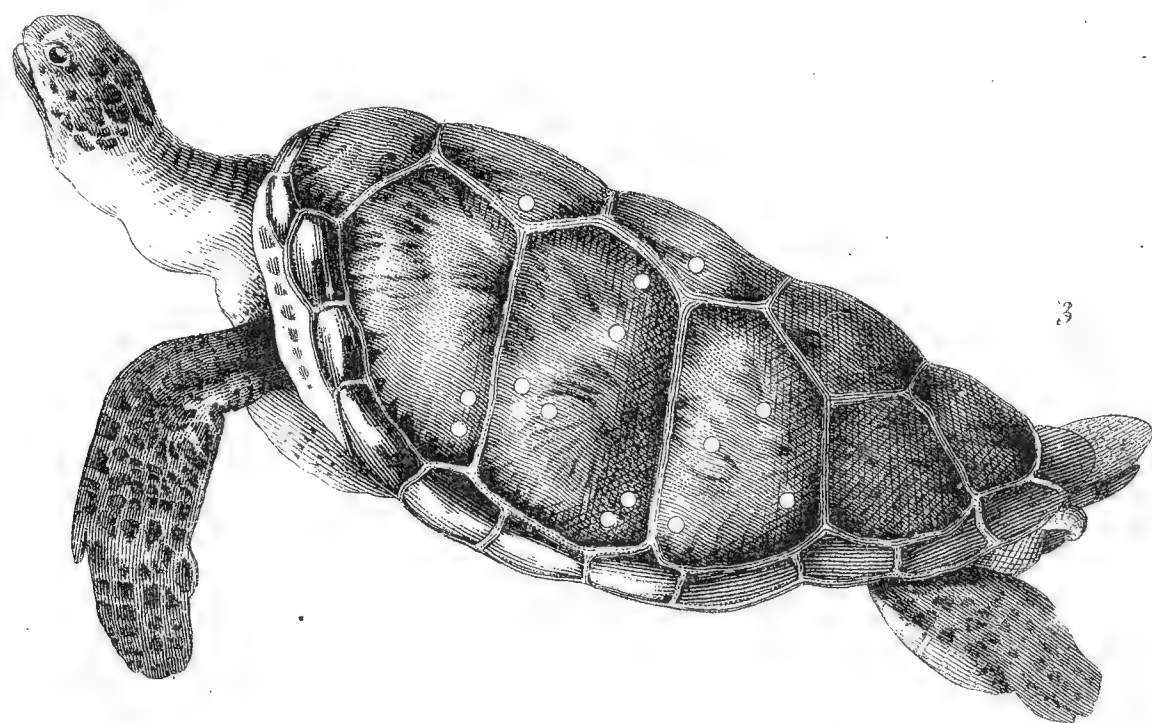
Genera Testudo, Emys, Cistuda, Chelonia, Chelys, Tyrse.



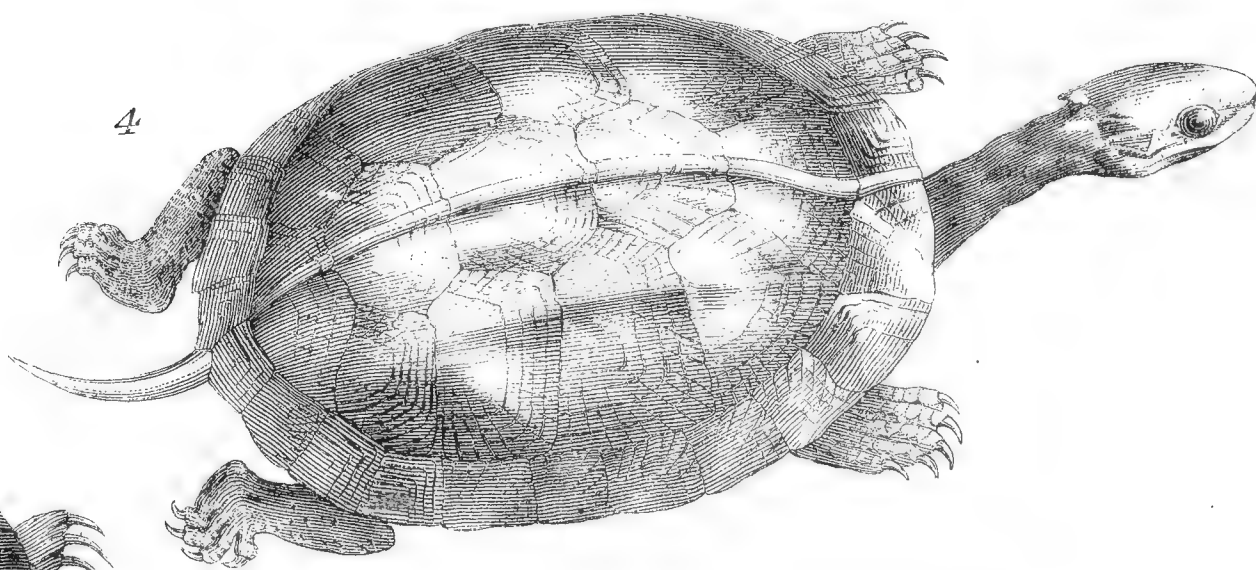
*Testudo græca*.—Common Tortoise.



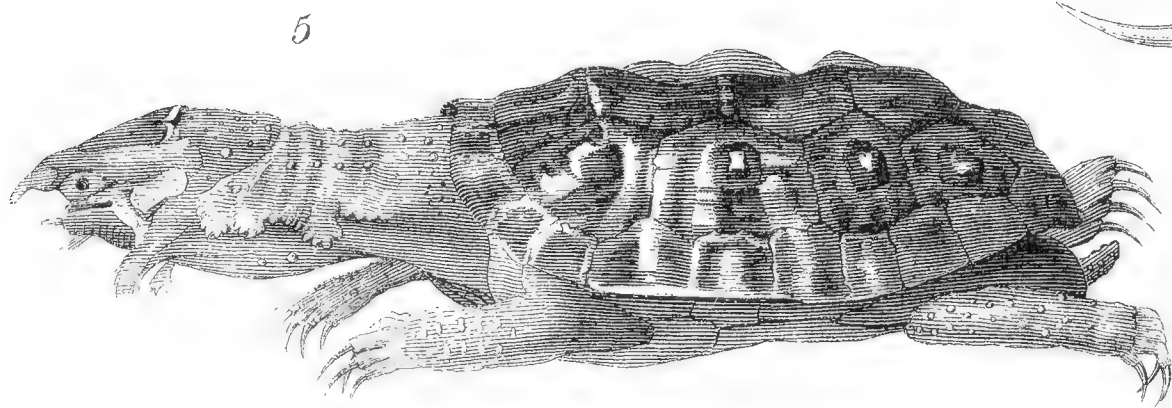
*Emys scripta*.—Written Tortoise.



*Chel. virgata*. Striped Tortoise



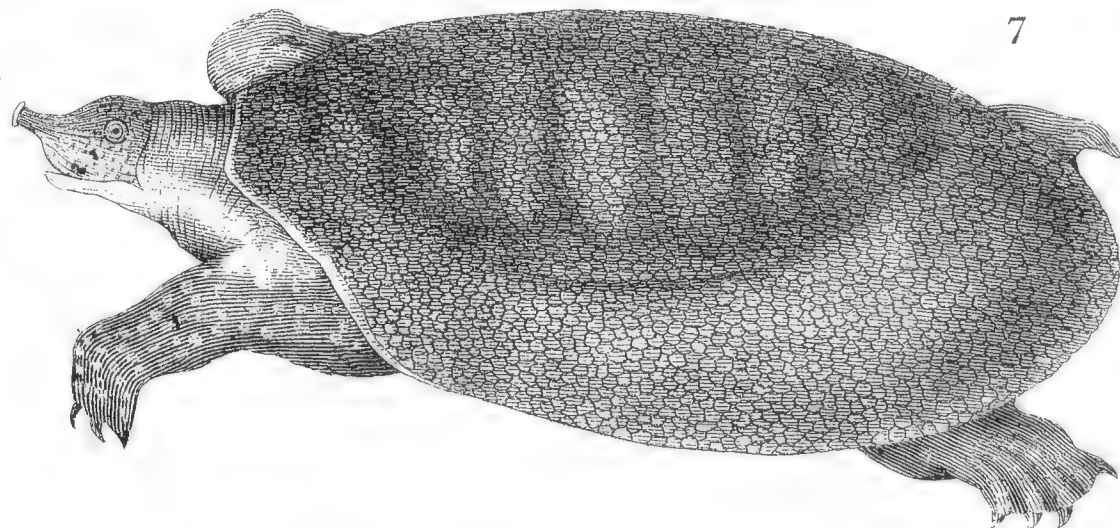
*C. trifasciatus*. Three striped Box Tortoise



*Chelys Matumata*. Matamatu or Fimbriated Tortoise.



Elongation of the snout



*T. Niloticus*. Nilotic three toed Tortoise

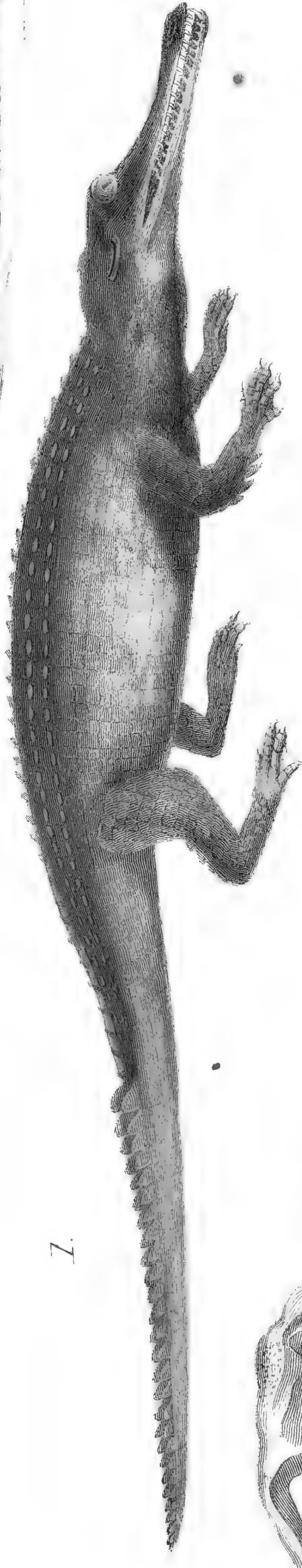




Genera. Gavialis, Crocodilus, Jacare.



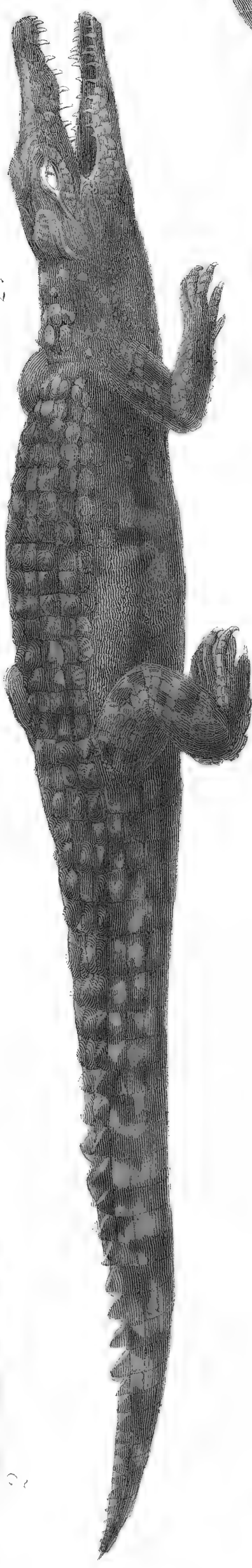
1.



*G. Gangeticus. Indian Crocodile or Gavial.*



2.



*Cro. vulgaris. Nilotic Crocodile*



3.



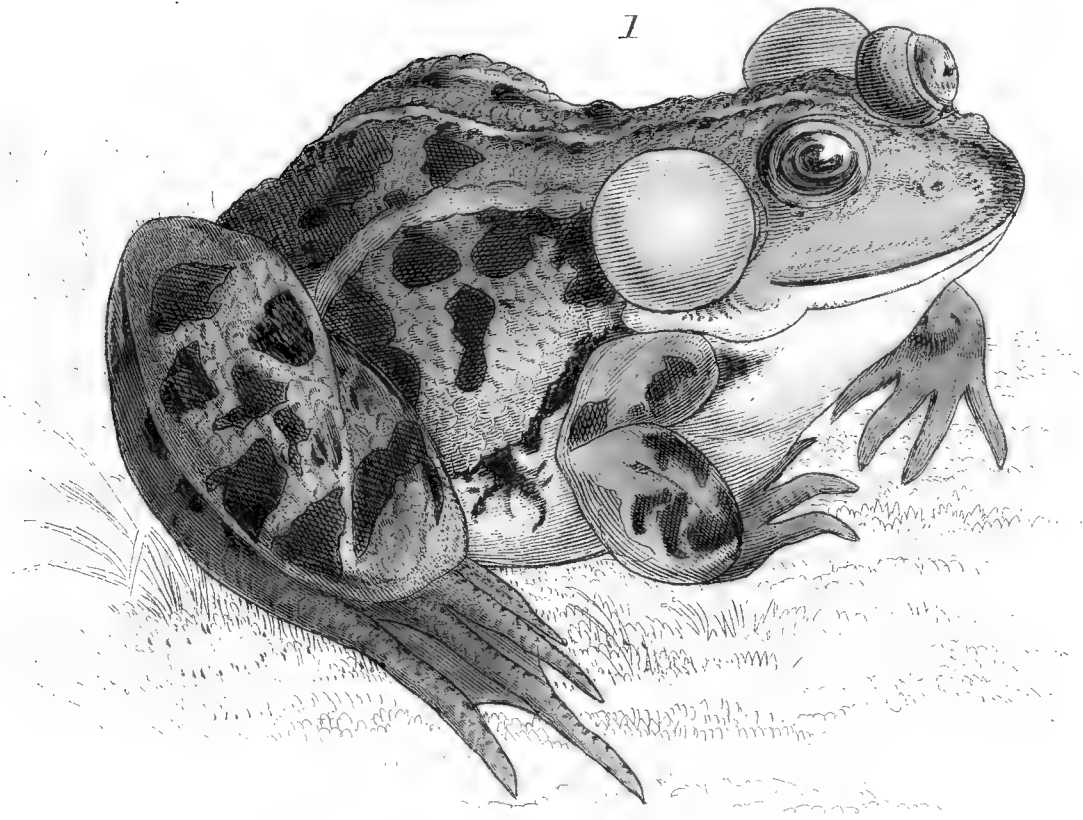
*J. Sclerops. Spectacled Alligator*



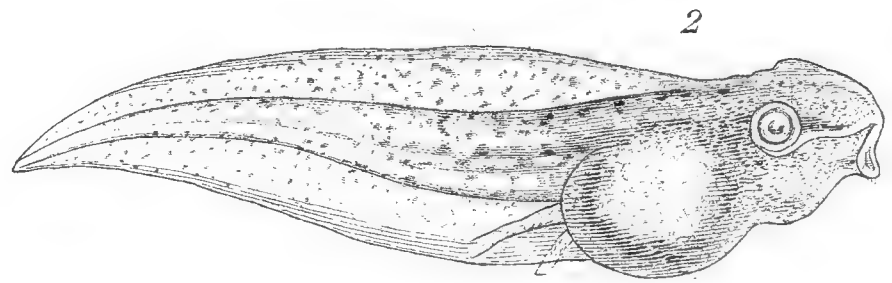
Order. Batrachia.

Genera. Rana, Ceratophrys, Hyla.

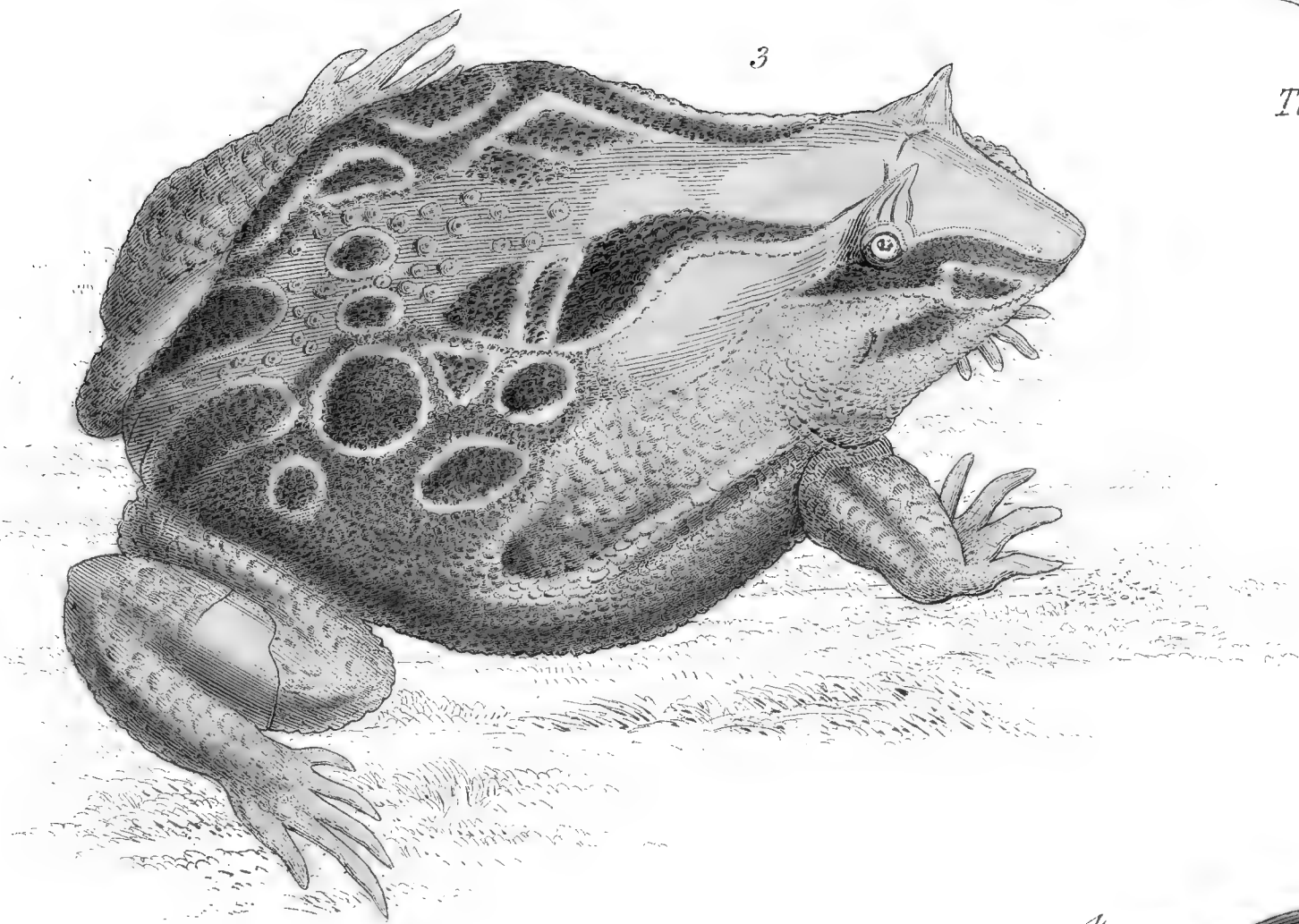
Sub-order Salientia. /Leapers/



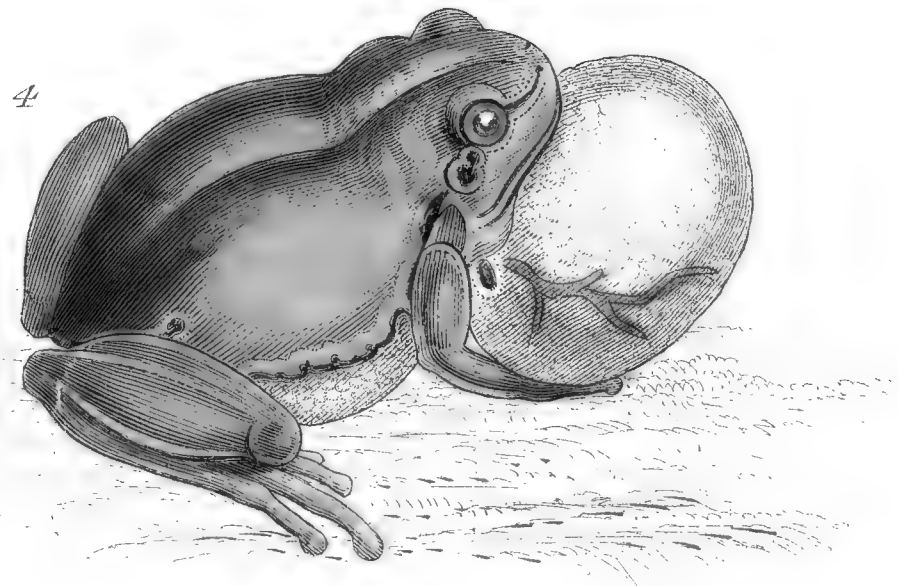
*Rana esculenta*, — Edible Frog.



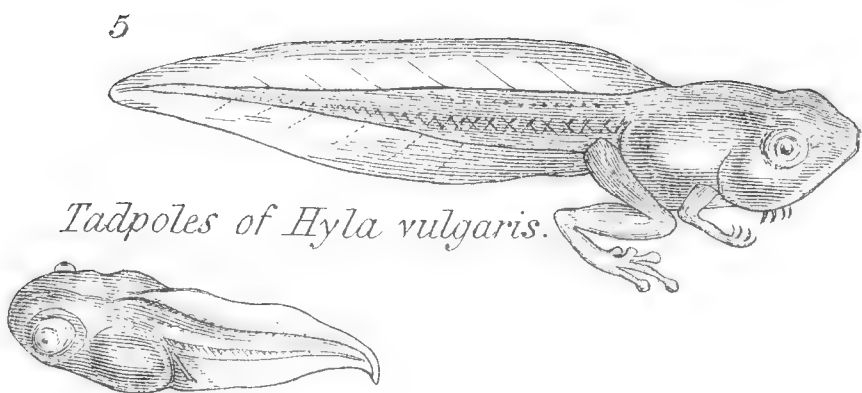
*Tadpole of Rana esculenta.*



*Ceratophrys cornuta* — Horned Frog.



*Hyla vulgaris*. — Tree Frog.



*Tadpoles of Hyla vulgaris.*



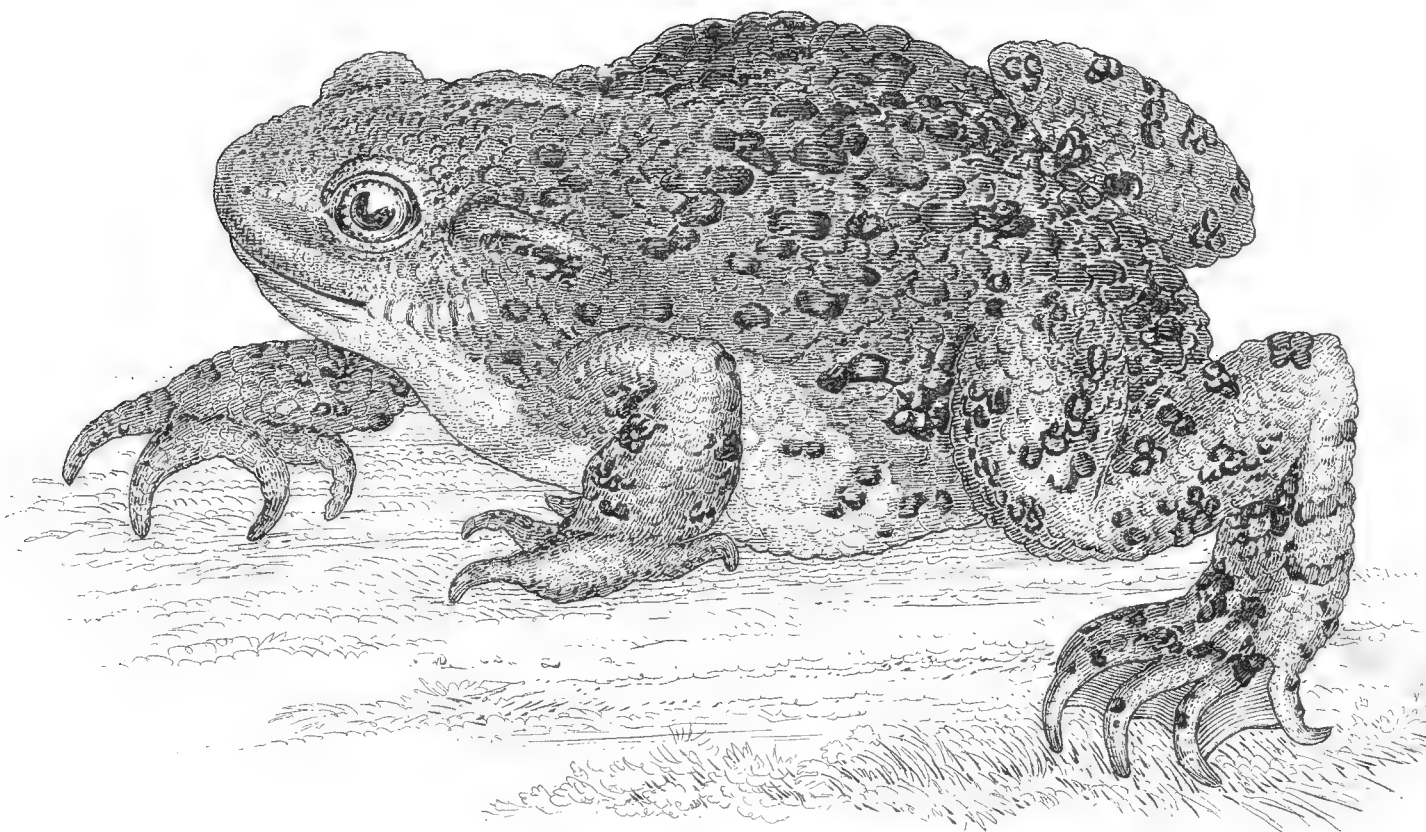


Order. Batrachia.

Genera. Rana, Pipa, Bombinator.

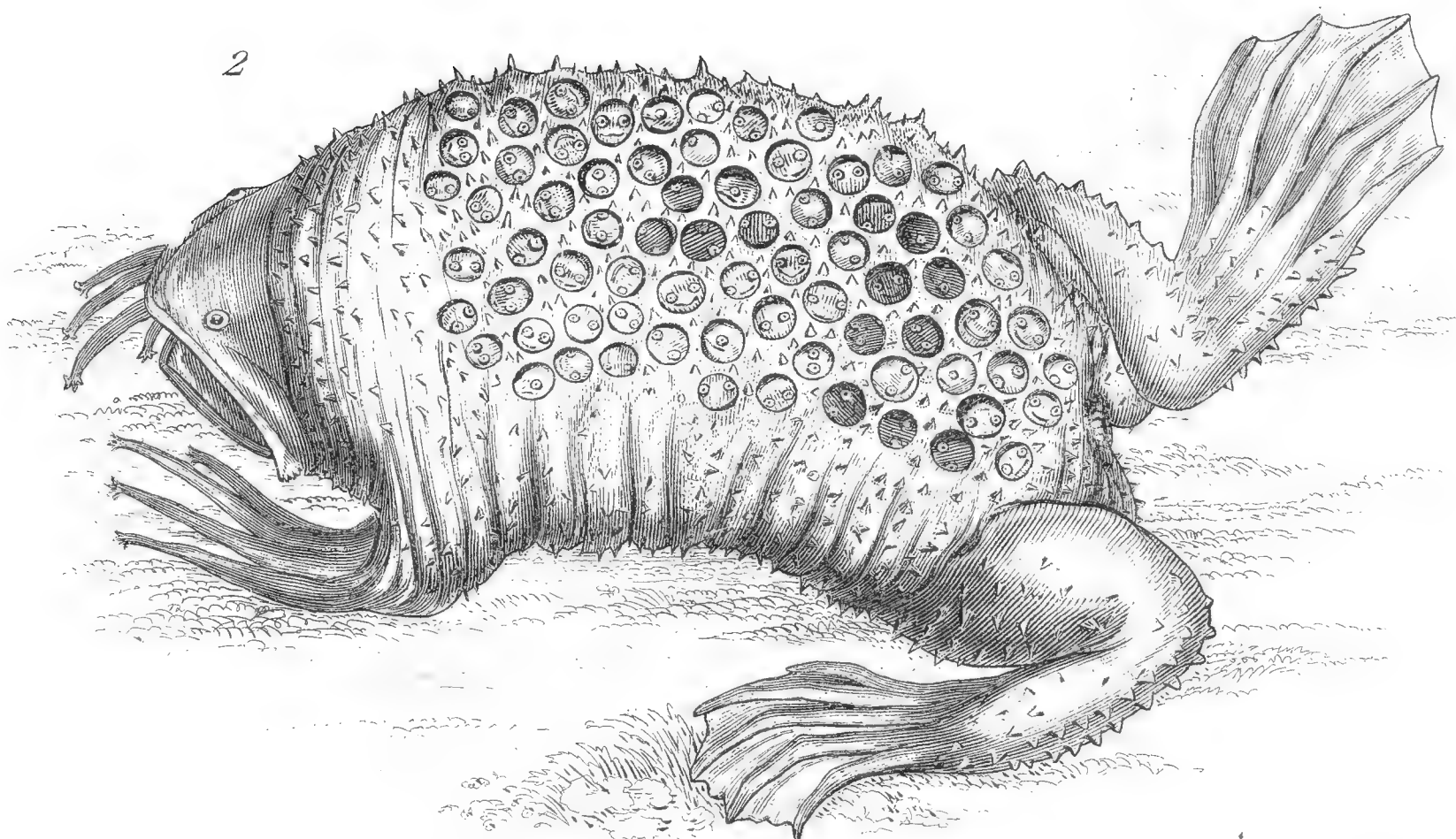
Sub-order Salientia. /Leapers/

1



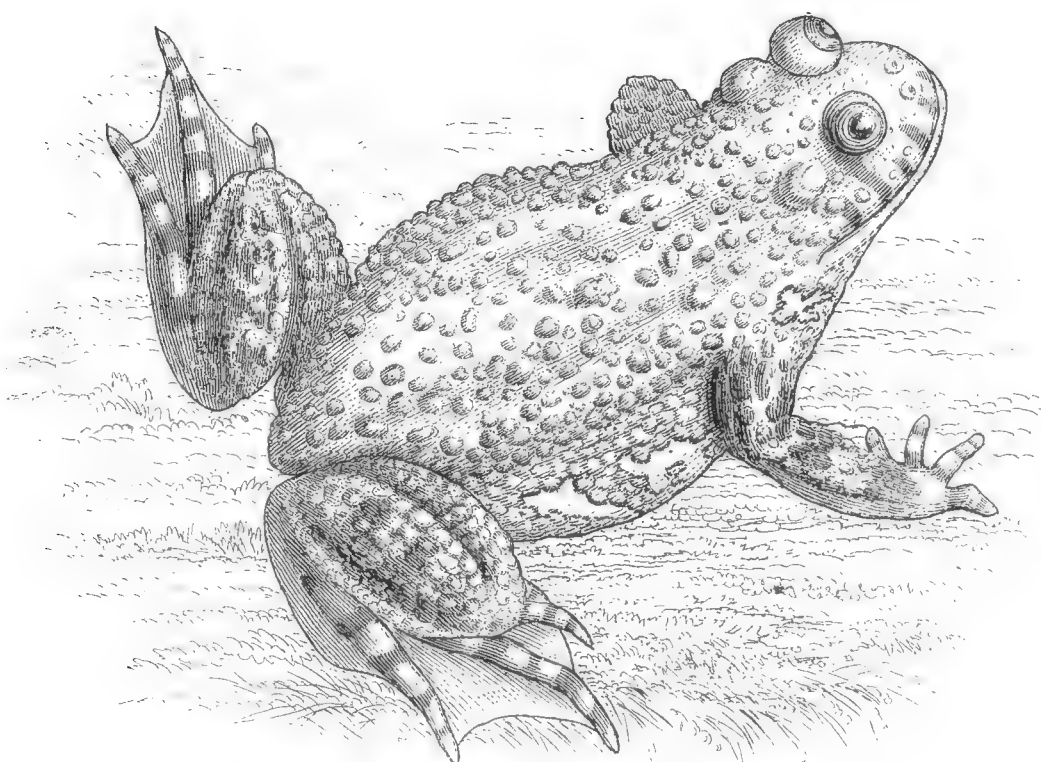
*Bufo vulgaris.*—Common Toad.

2



*Pipa americana.*—Surinam Toad.

3



*Bombinator igneus.*—Fire-bellied Toad.



AMPHIBIA.

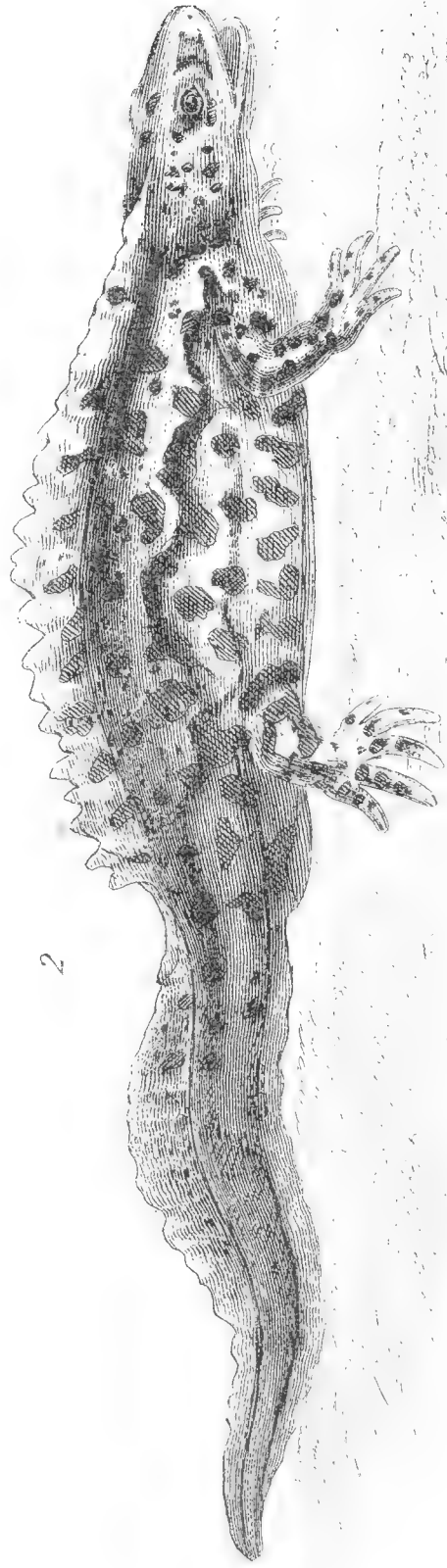
Sub-order: Gradientiæ. / Walkers /

Order: Batrachia

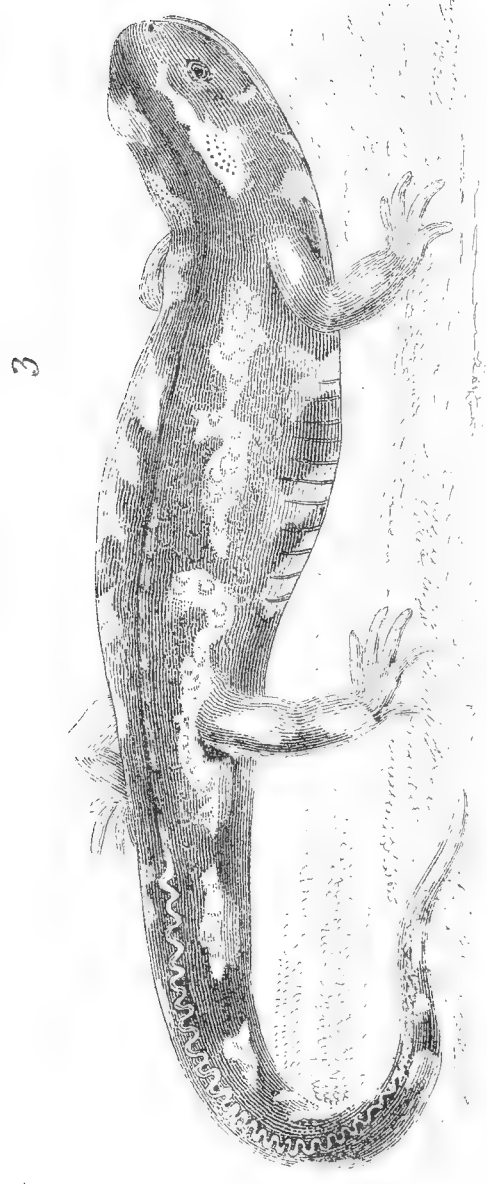
Genera. Protonopsis. Triton. Salamandra.



*P. Horrida*.— Hellbender or Gigantic Salamander.



*T. Cristatus*.— Marbled Newt.



*Salamandra maculosa*.— Spotted Salamander.





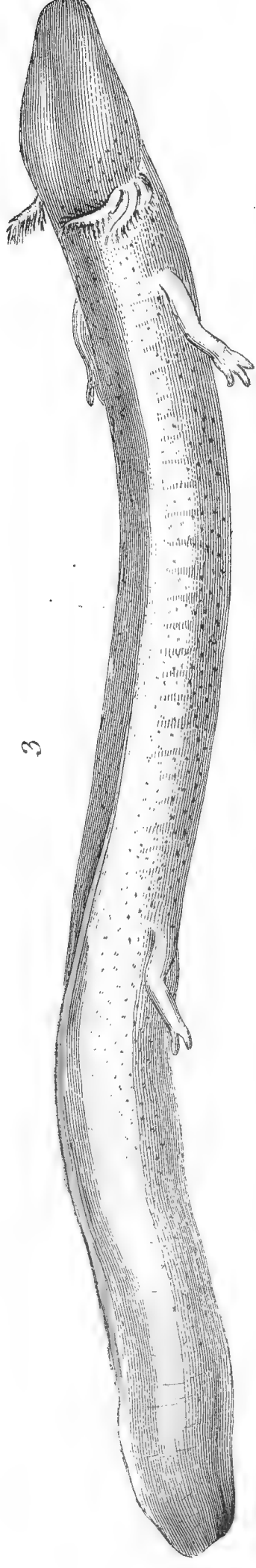
Order. Meantia.

Genera. Siren, Axolotes, Proteus.



*S. Lacertina*,—Siren or Mud eel.

1



*P. Anguinus*,—Snake-like Proteus.

3

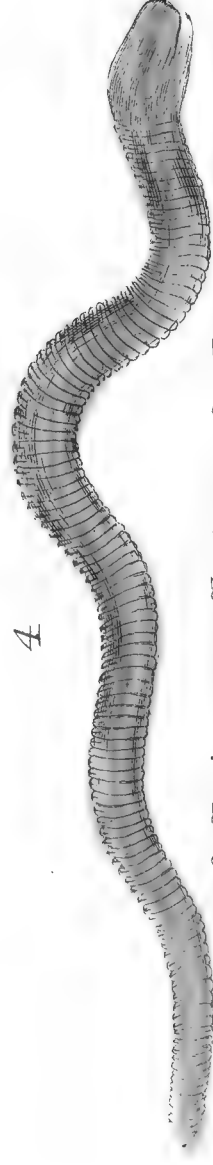


*A. Mexicanus*. Axolotl.

2

Order. Pseudophidia.

Genera. Cæcilia.



*C. Glutinosus*.—Glutinous Cæcilia.

4



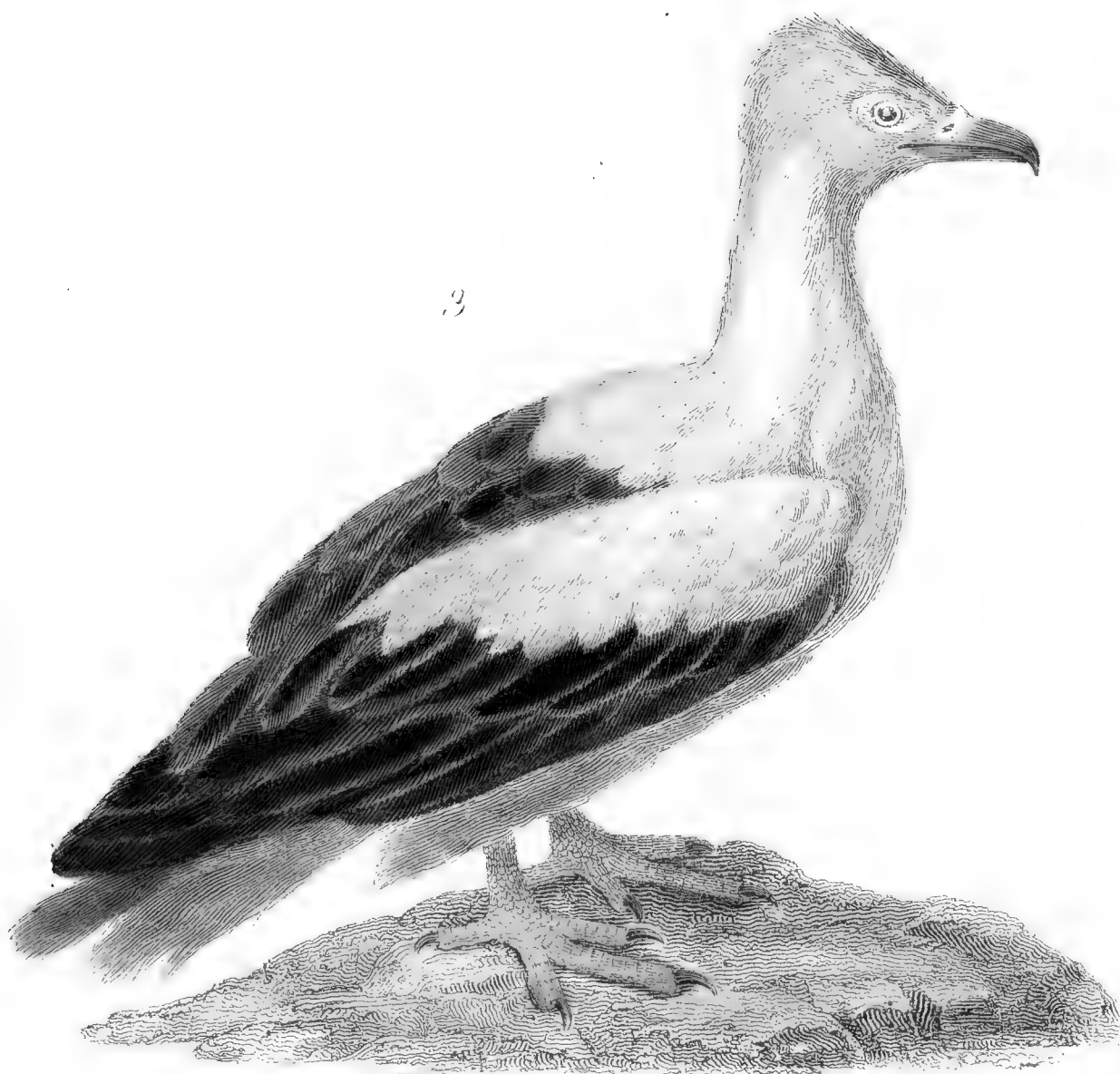
Order. Accipitres.

Genera. Vultur .Sarcorhamphus. Neophron

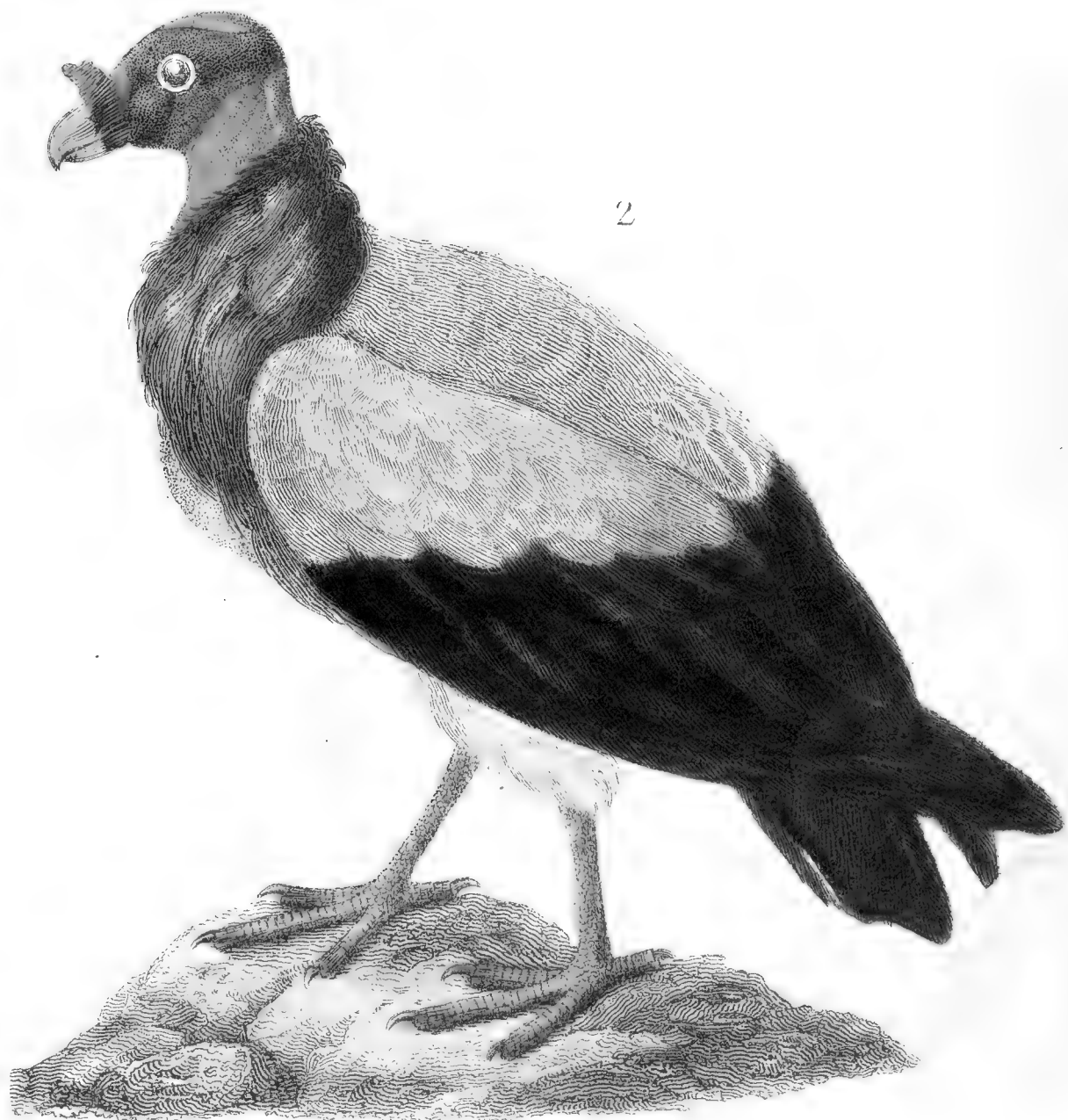
Family Vulturidæ



*Vultur Monachus*. Arabian Vulture.



*Neophron Percnopterus* Egyptian Vulture.



*Sarcorhamphus Papa*. King Vulture.

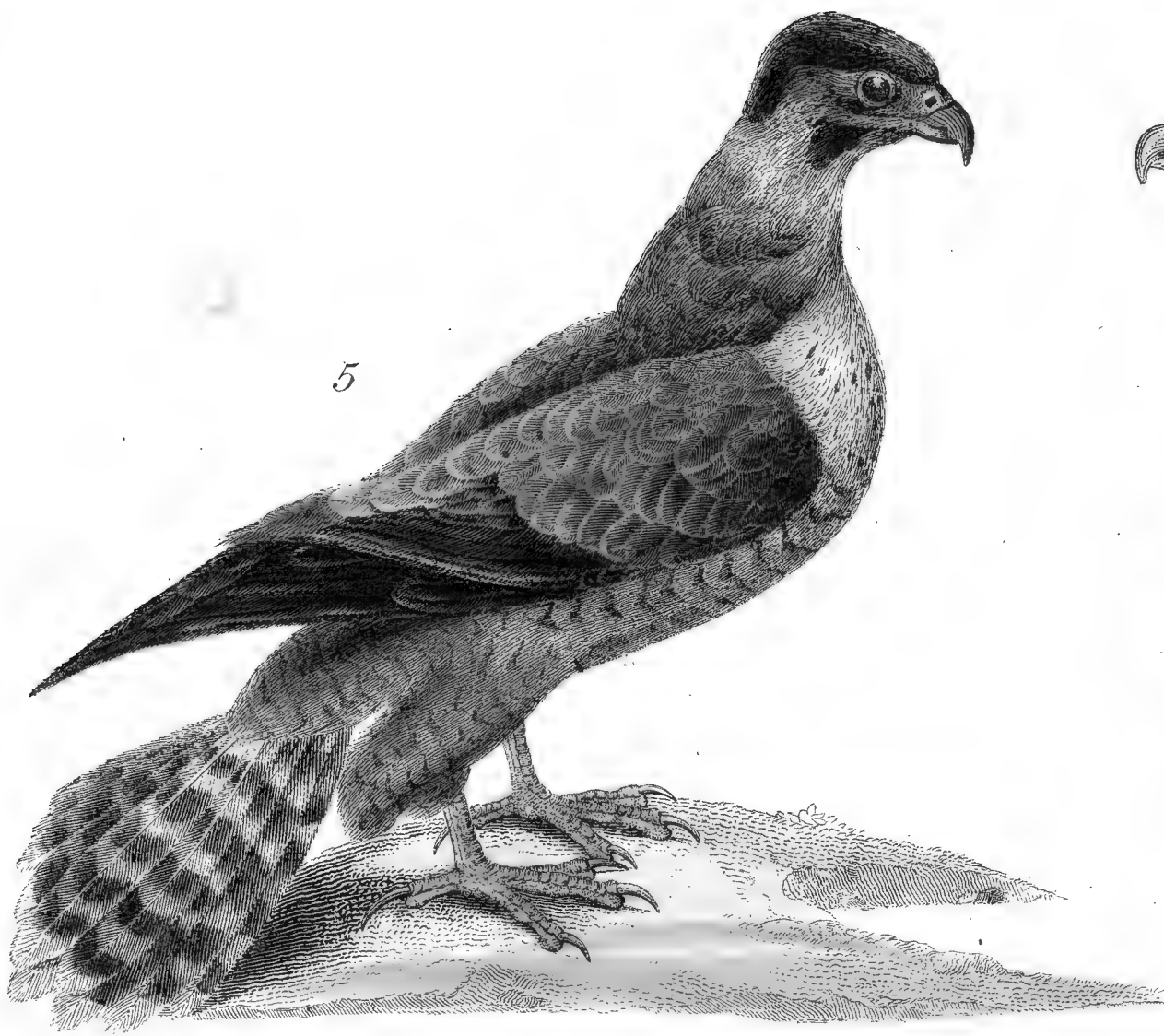




Order. Accipitres.

Genera Gypaëtos Falco, Spizaëtus

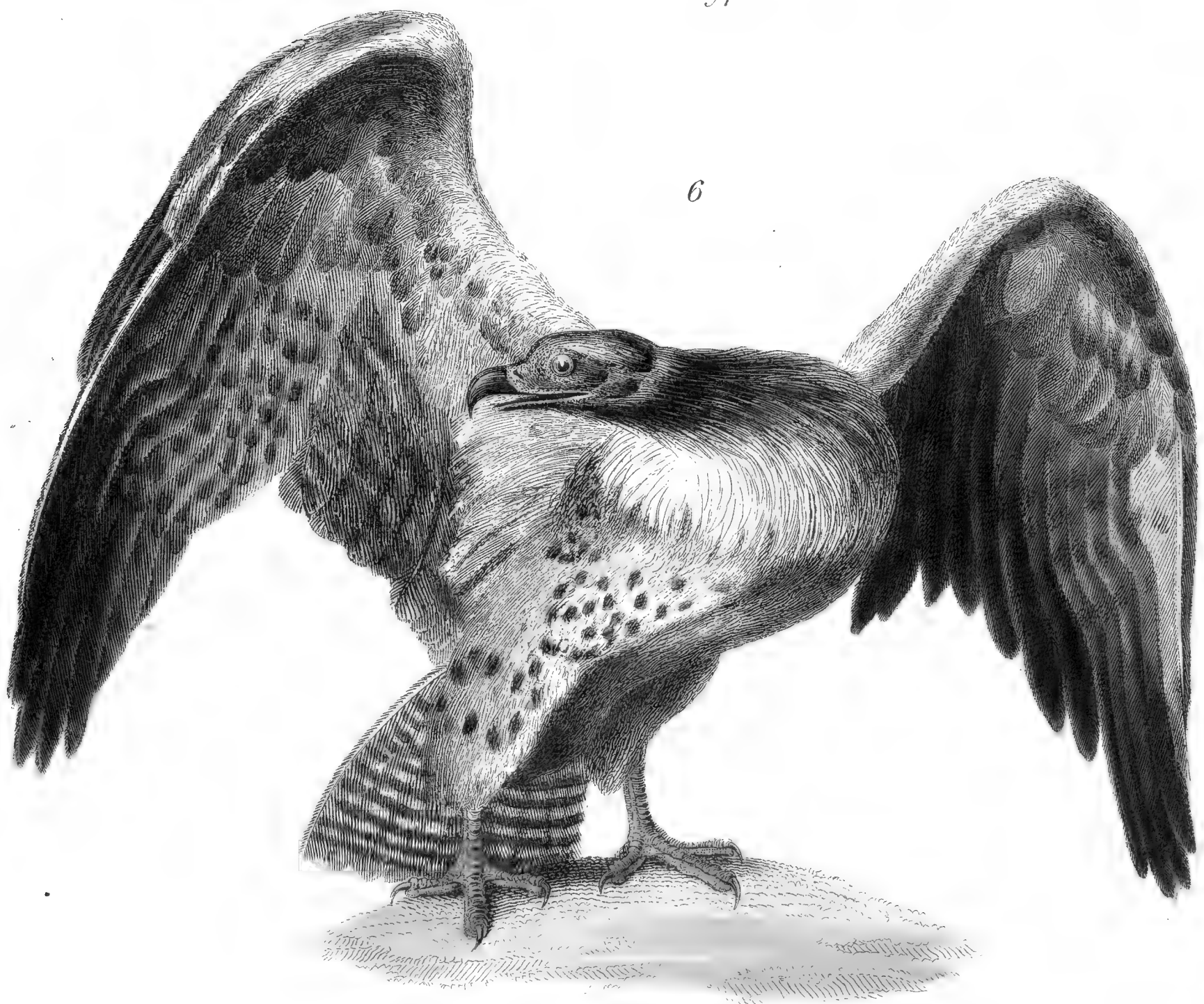
Family Vulturidæ.  
Falconidæ.



*Falco berigora*: Cream-bellied Falcon.



*Gypaëtos barbatus*: Bearded Vulture.



*Spizaëtus bellicosus*: Martial Eagle.





Order, Accipitres.

Genera Buteo, Serpentiarius, Syrnium.

Families { Falconidae.  
Strigidae.



*Buteo Lagopus. Rough-legged Buzzard.*



*Serp. Reptivorus. Secretary Bird.*



*Syrnium. aluco. Brown Owl.*

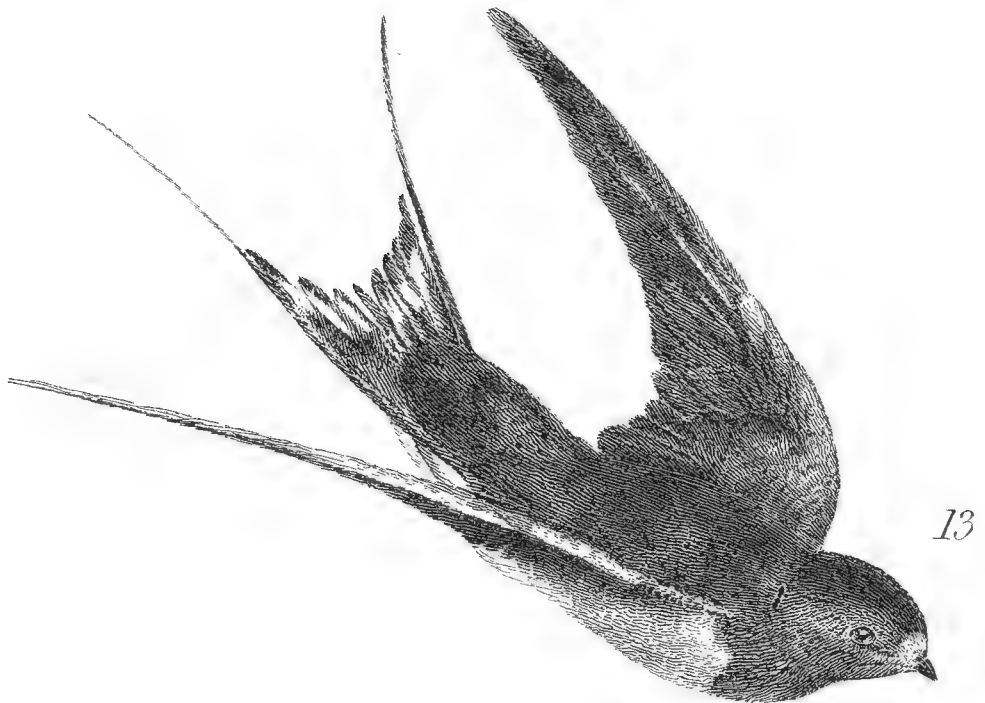




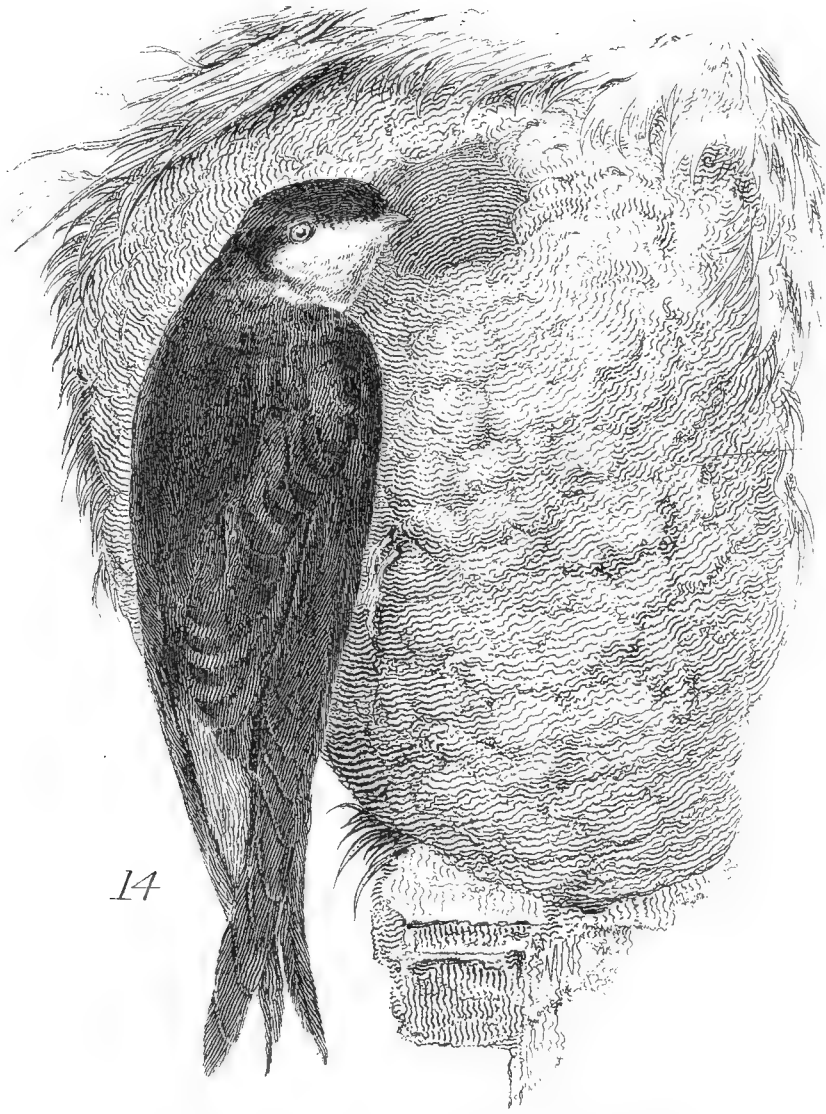
Order. Passeres

Genera Hirundo Cypselus. Collocalia

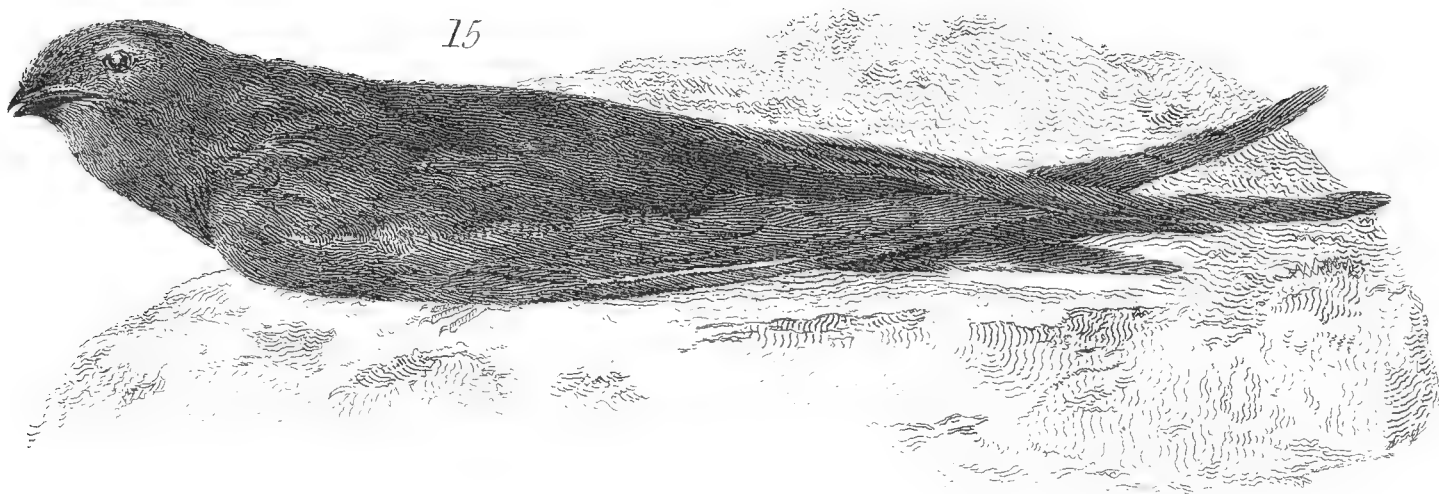
Families. { Hirundinidæ.  
Cypselidæ.



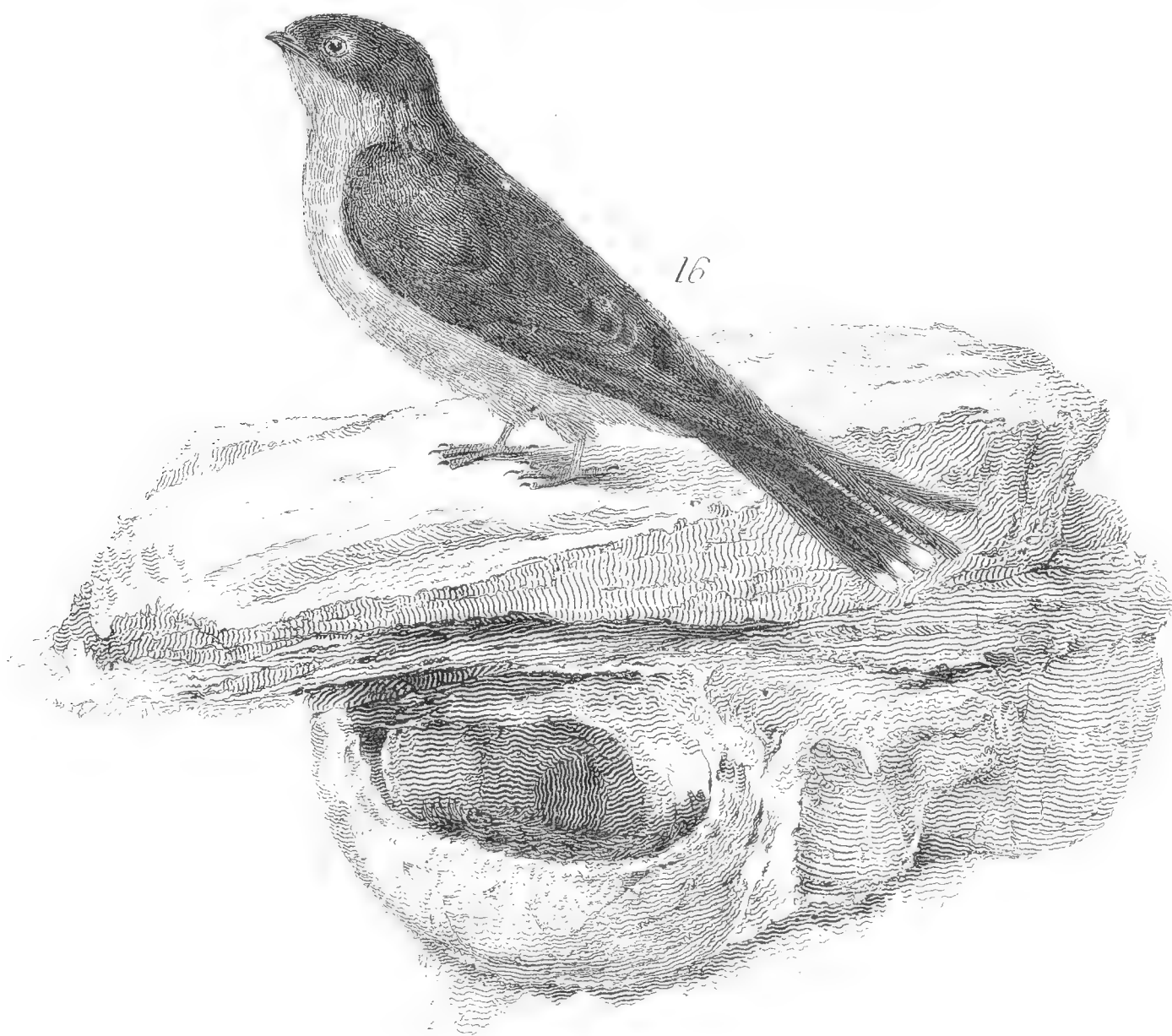
*H. Rustica . Chimney Swallow.*



*H. Urbica . House Martin.*



*Cyp. Apus. Common Swift.*



*Col . Esculenta . Esculent Swallow.*



Order. Passeres

Genera Caprimulgus. Macrodipteryx Eurylaimus.

Families { Caprimulgidæ.  
Cecropidæ



*C. Europæus. Common. Goat Sucker.*



*E. Javanicus.*



*M. Longepennis. Leona Goat Sucker.*





Order. Passeres.

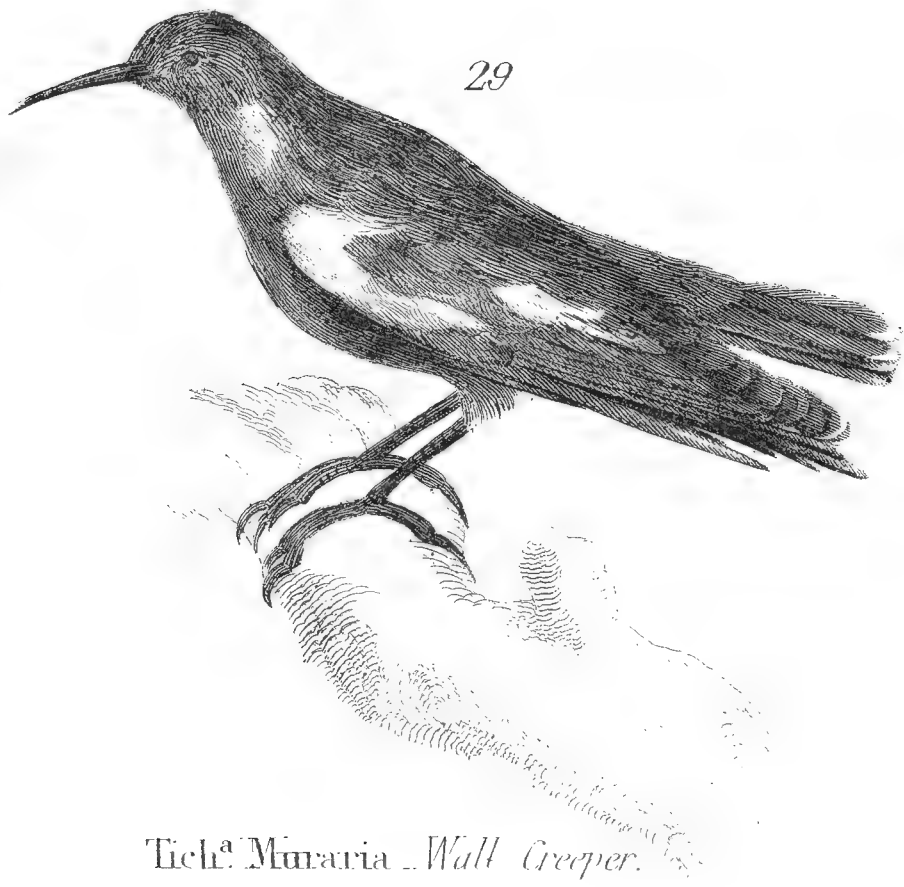
Genera. Certhia, Tichodroma, Sitta, Menura.

Family. Certhiadae.



28

C. Familiaris. Creeper.



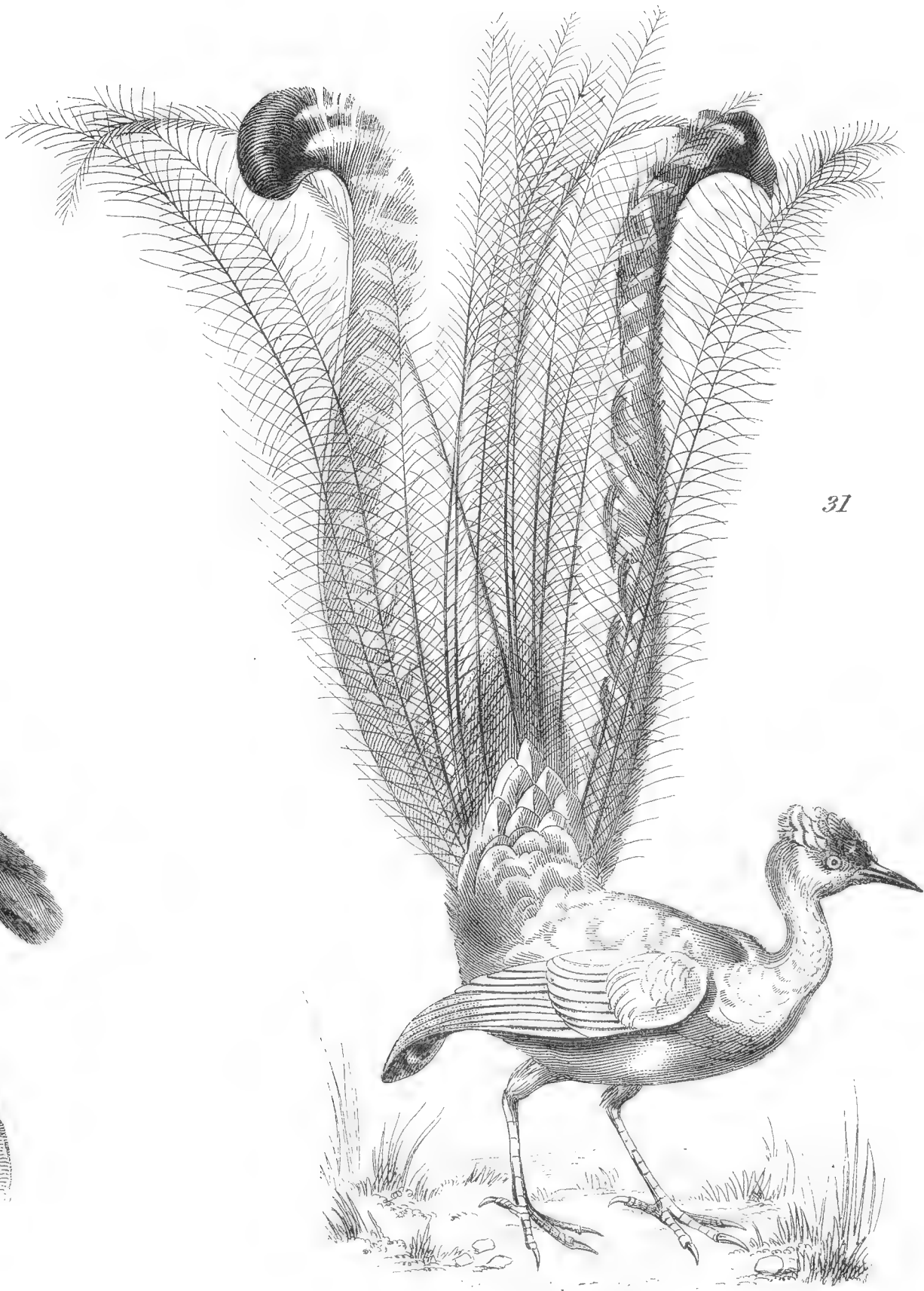
29

Tich. Muraria. Wall Creeper.



30

S. Europaea. Nuthatch.



31

Menura superba — Lyre bird



Order. Passeres

Genera. Mecistura. Erythacus. Minus. Muscicapa.

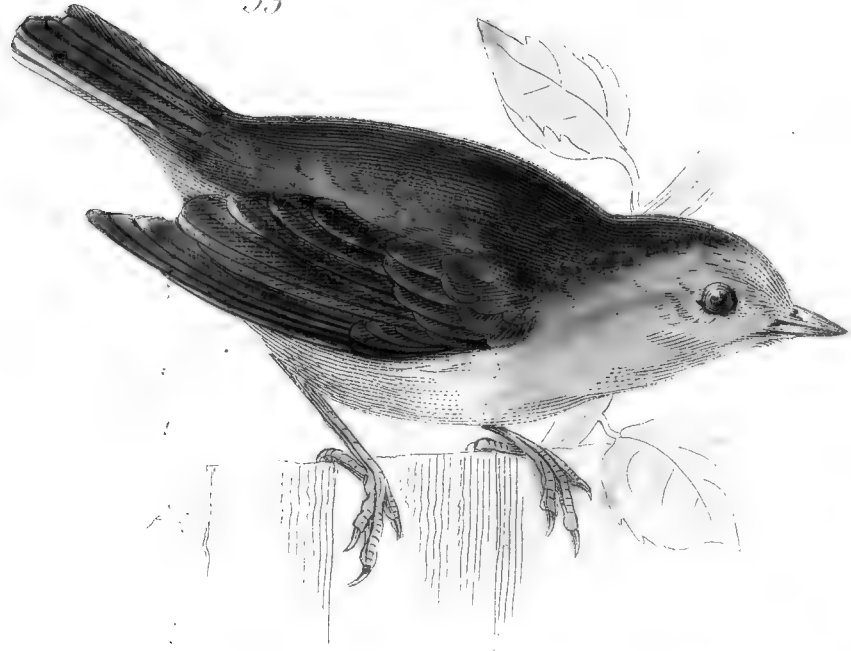
Families { Sylviidæ.  
Turdidæ.  
Muscicapidæ.

32



M. Candata. Long tailed Titmouse.

33



Erythacus rubecula Red-breast

34



M. Polyglottus Mocking-bird.

35



M. Griseola. Spotted Flycatcher.

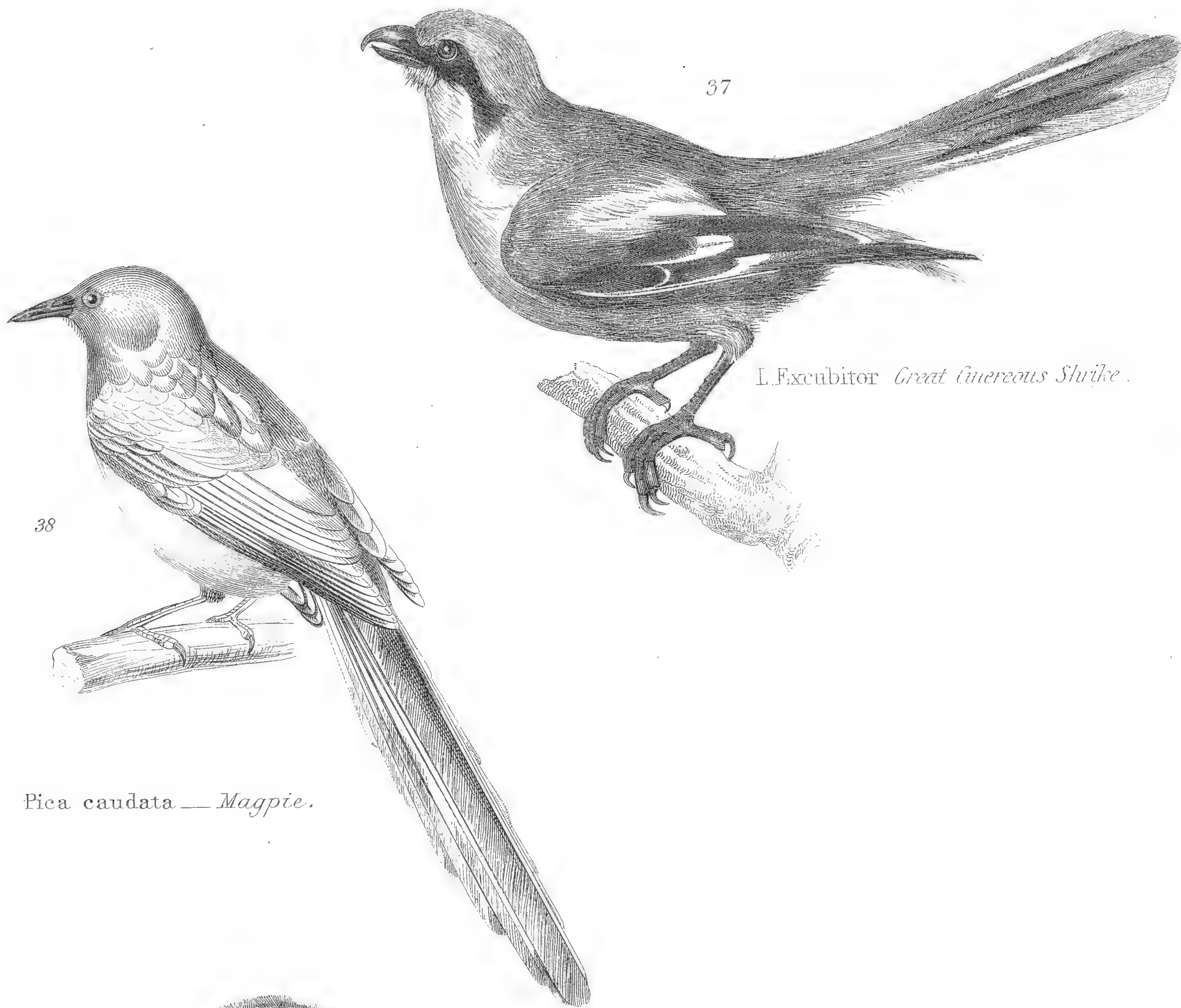




Order. Passeres.

Genera. Rupicola. Lanius. Pica

Families { Ampelidæ.  
Laniidæ.  
Covidæ.





Order. Passeres

Genera. *Paradisæa*. *Sturnus* *Corythaix* *Buceros*

Families  
*Paradisæidæ*  
*Sturnidæ*  
*Musophagidæ*  
*Bucerotidæ*



*Paradisæa apoda*—*Emerald Paradise Bird*.



*Corythaix persa*—*Touraco*.



*Buceros Rhinoceros*—*Hornbill*



*Sturnus vulgaris*—*Starling*.

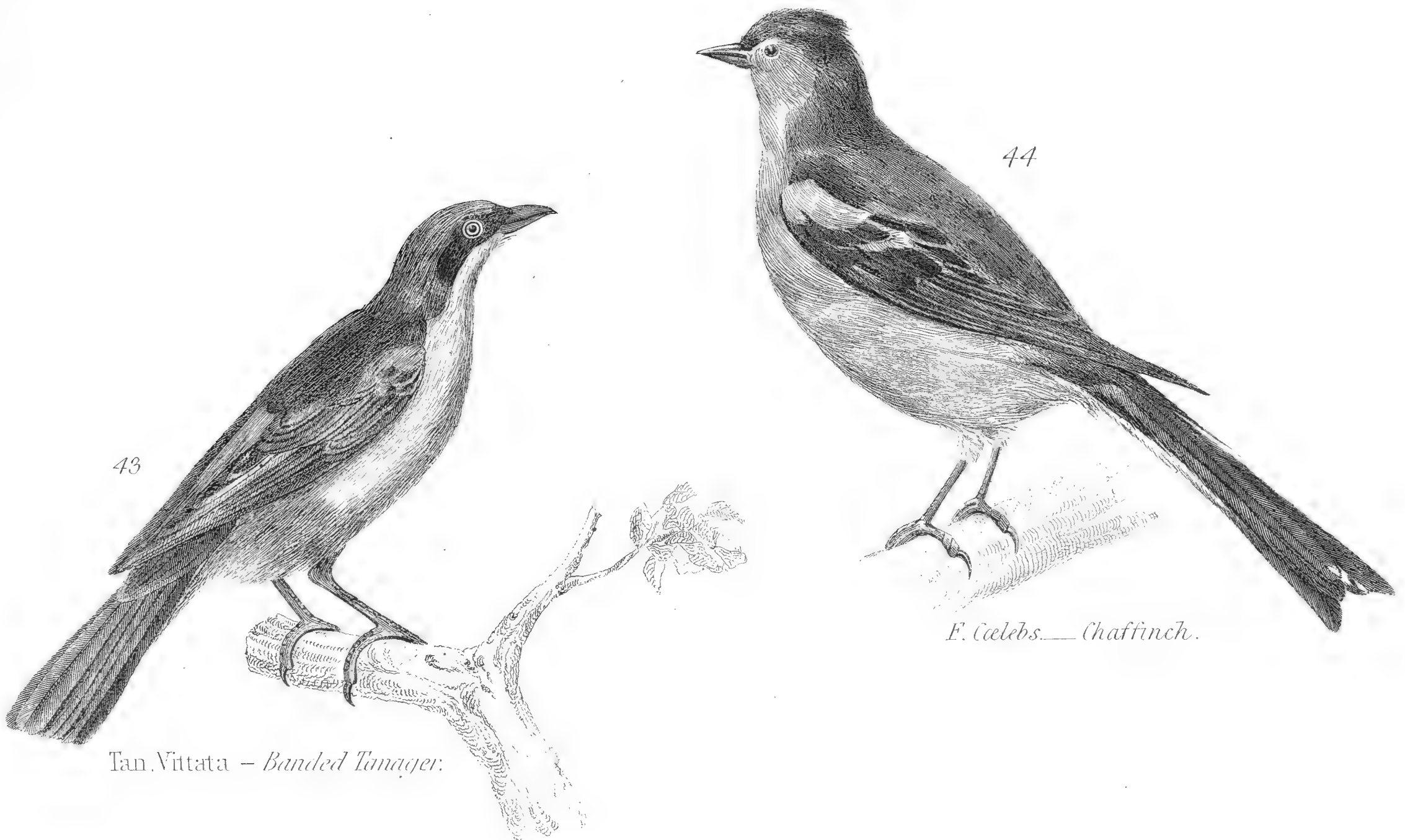




Order. Passeres

Family. Fringillidæ

Genera. Tanagra. Fringilla. Emberiza. Alauda.

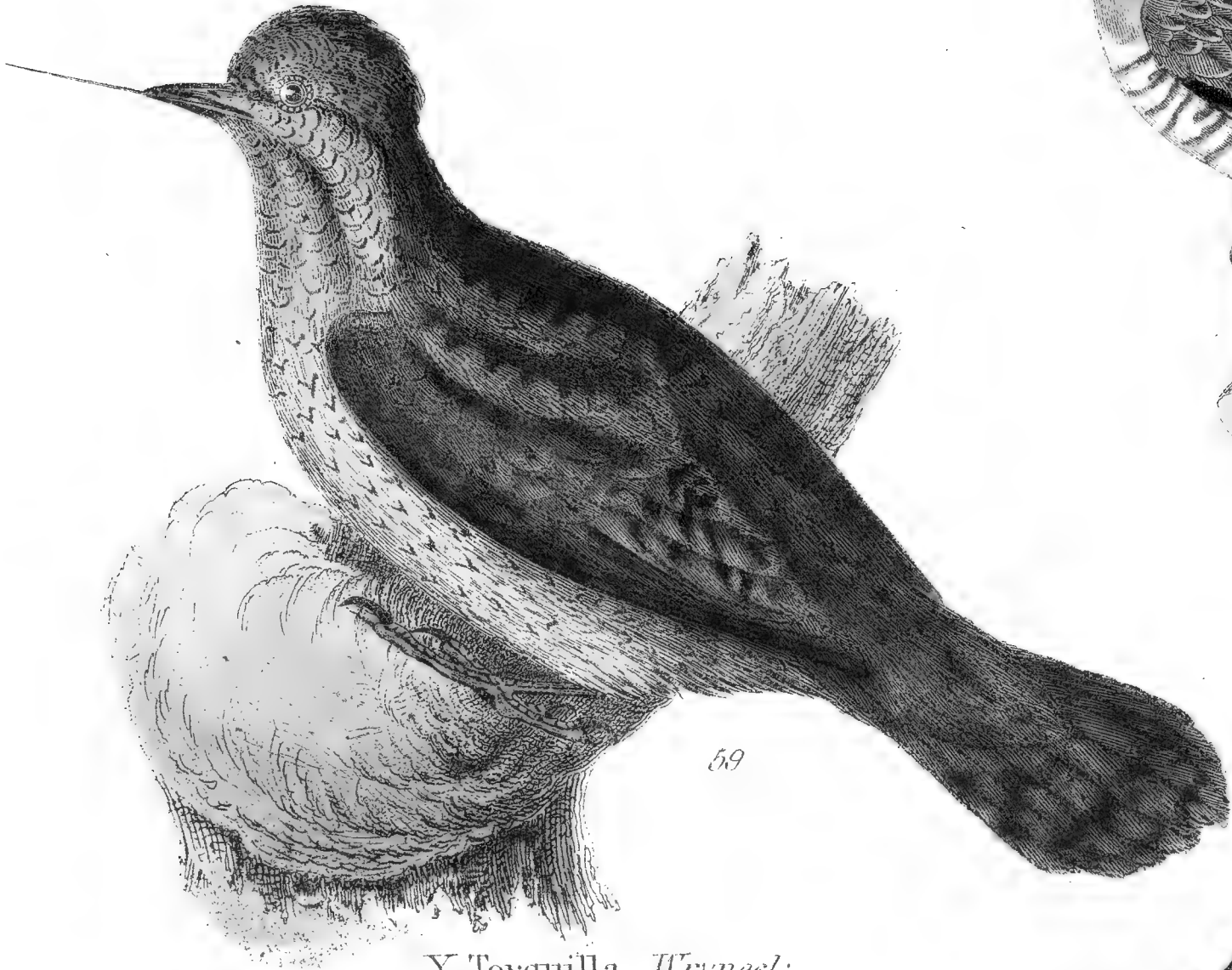




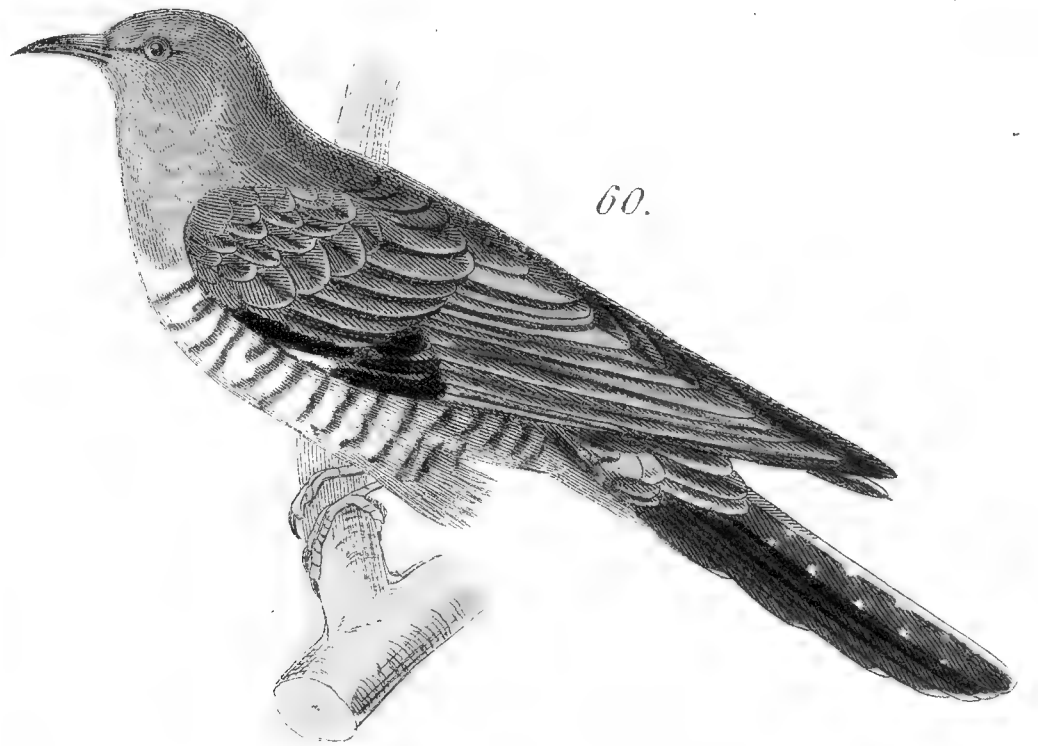
Order: Scansores.  
Columbæe.

Genera: Yungipicus, Cuculus, Columba, Carpophaga.

Families {  
Picidæ.  
Cuculidæ.  
Columbidæ.



Y. Torquilla. Woodhoopoe.



Cuculus canorus — Cuckoo

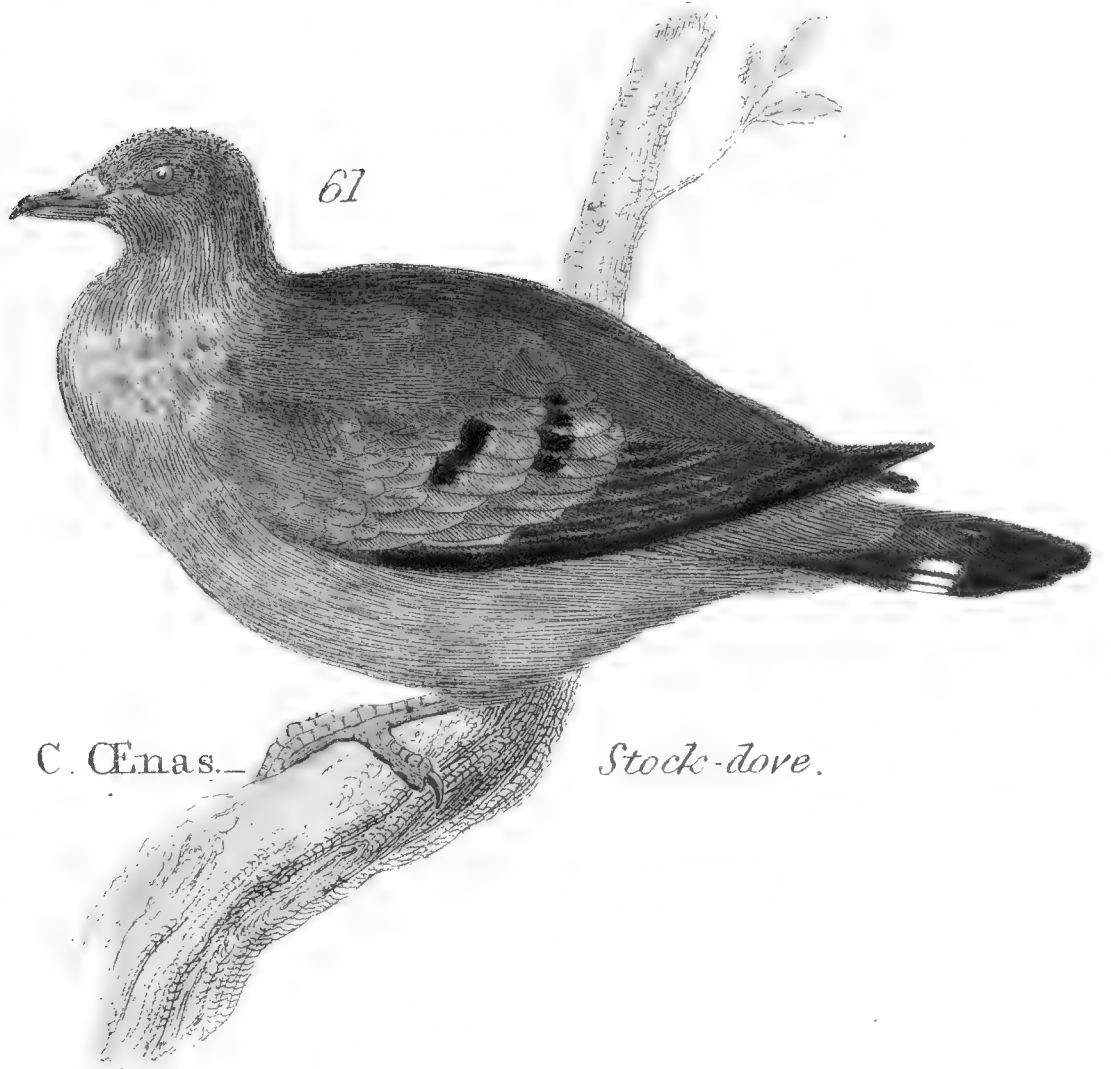


C. Punicea.

White-headed Pigeon.



Car. Magnifica. New-Holland Pigeon.



C. Œnas.

Stock-dove.



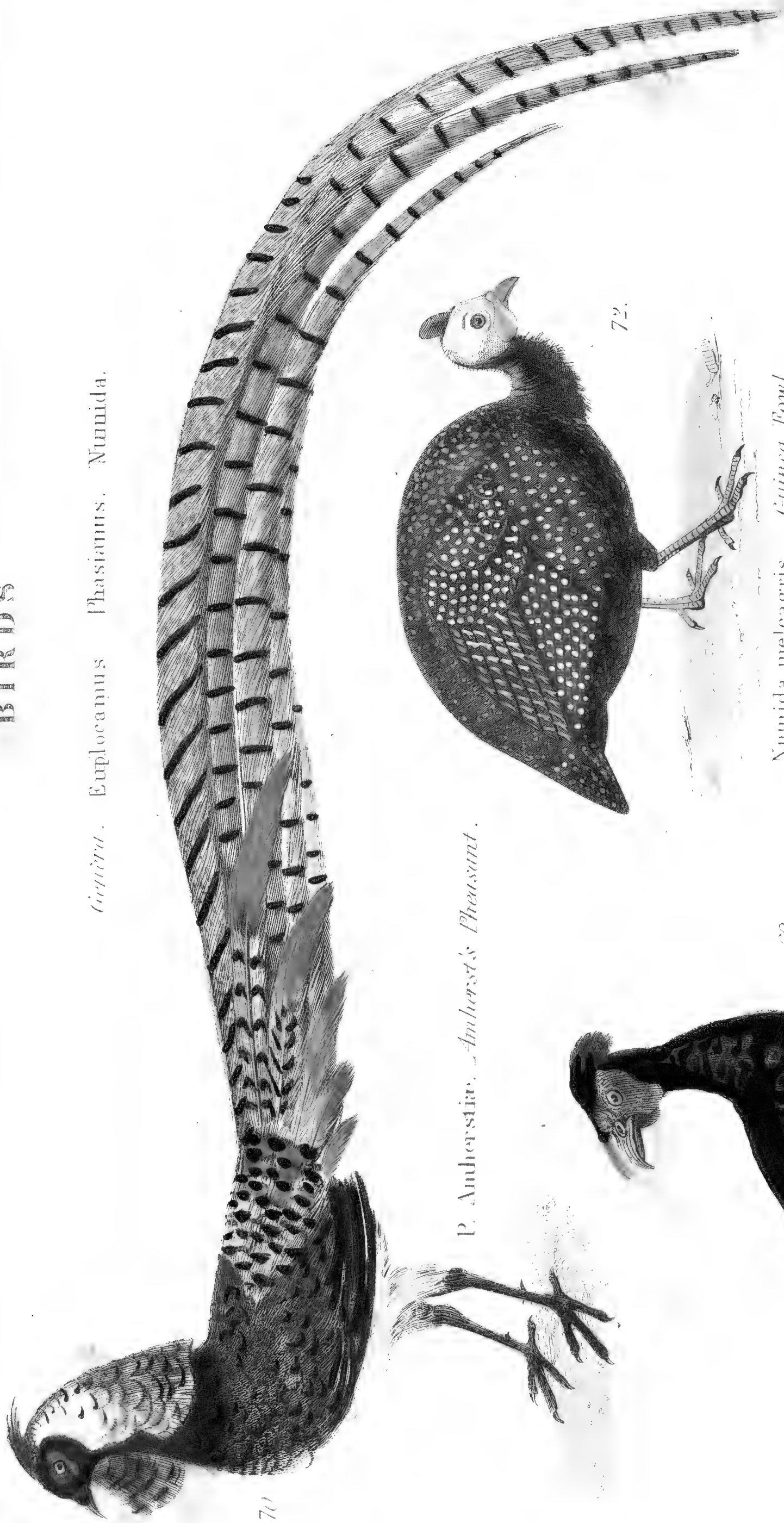


BIRDS

Order, Gallinae

Family Phasianidae.

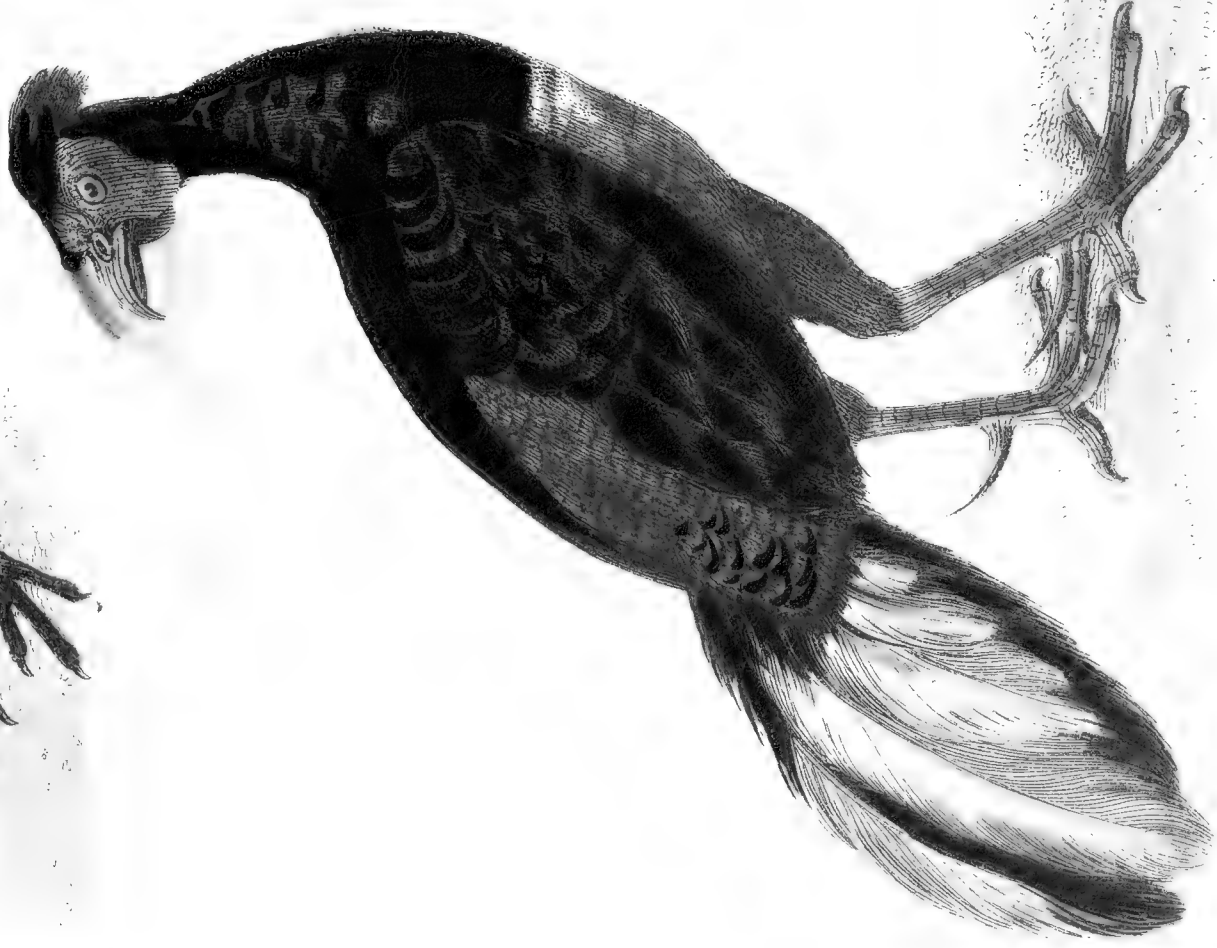
Genus, Euplocamus Phasianus, Numida.



P. Amherstiae, Amherst's Pheasant.

Numida meleagris — Guinea Fowl.

69



E. legatus, Fire backed Pheasant.

P. Nycthemerus, Silver Pheasant.

Drawn by Bonaparte.

Printed by J. W. Loring, 1847.

WILLIAM WACKENZEL, CLASCO, W. VIRGINIA. NEW YORK.



Order. Gallinæ

Genera. Crax Talegalla Megapodius, Perdex Röllulus, Chionis,

Families

Cracidæ  
Megopodidæ  
Tetraonidæ  
Chionididæ



75

M. Freycineti. Freycinets Mankivio.



73

Crax aleutor — Curassow



76

Perdex rubra. Red legged Partridge



Talegalla lathamii Brush Turkey



78

C. Necrophaga. White Sheathbill.



77

R. Cristatus.





Order. Scansores.

Family. Psittacidæ.

Genera. Conurus, Psittacula, Psittacus, Licmetis, Microglossum.



Conurus Solstitialis.  
*Yellow Parakeet.*



Licmetis Tenuirostris. *Long-nosed Cockatoo.*



Psittacus Erythacus. *Grey Parrot.*



Microglossum Aterrimum. *Grey Small-tongued Parrot.*



Psittacula Pileata.  
*Bonneted Psittacule.*

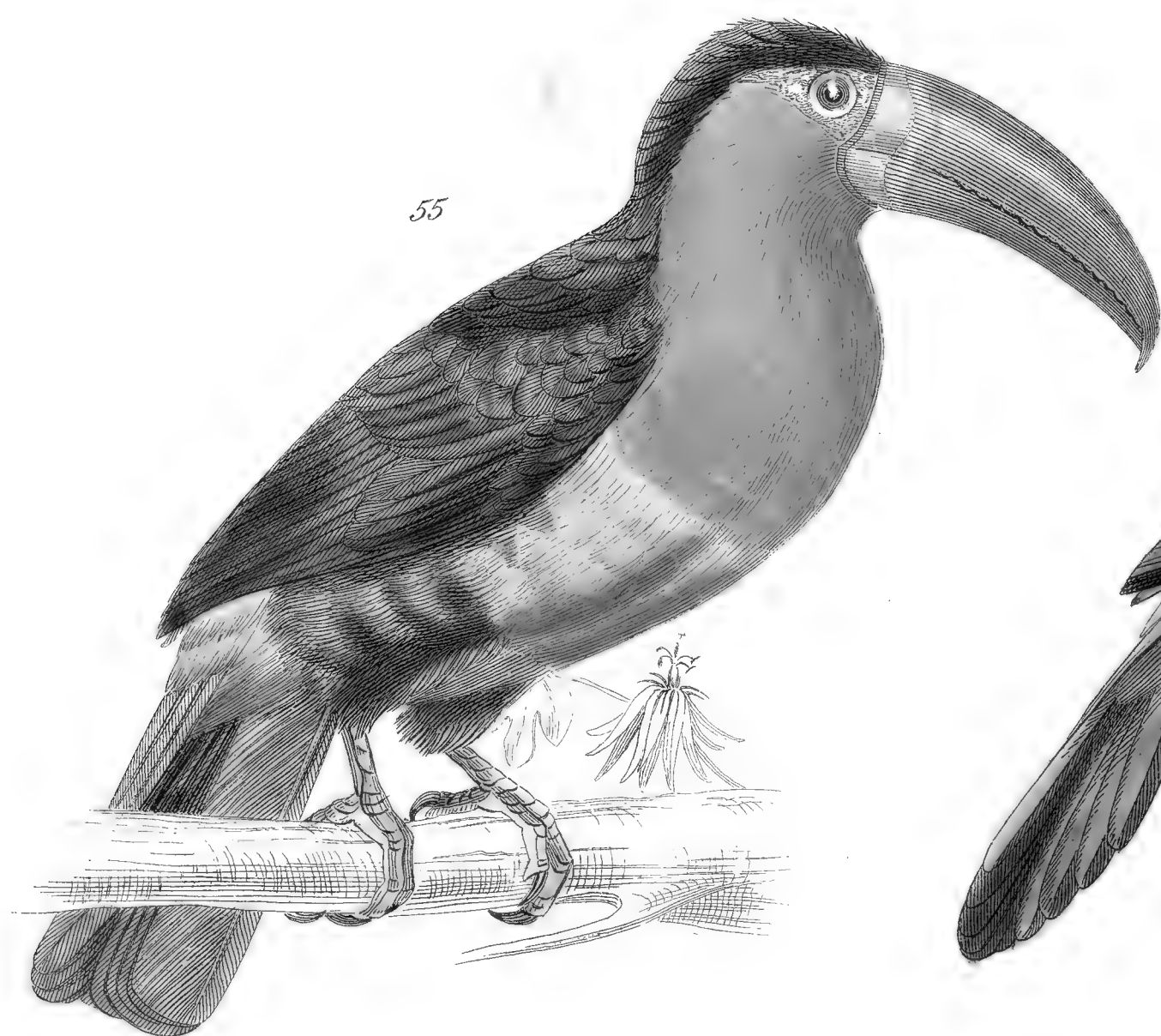




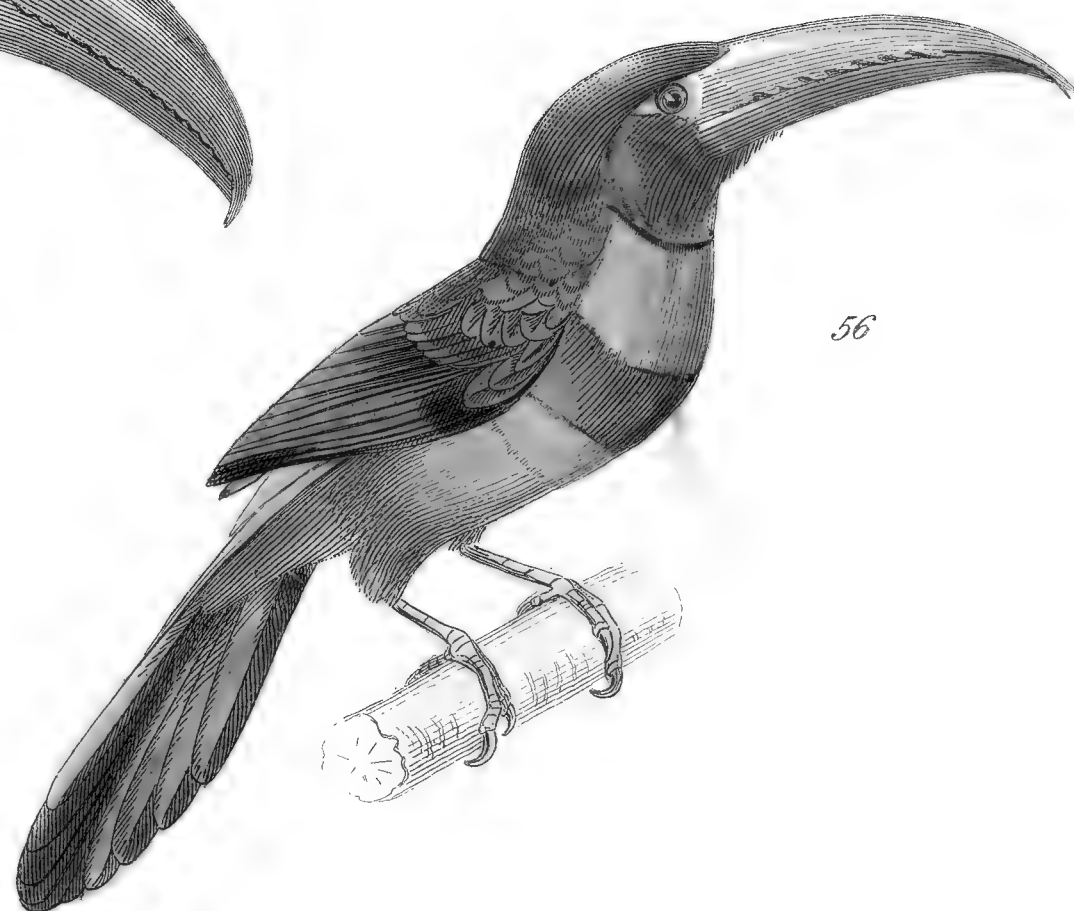
Order: Scansores.

Genera. Rhamphastos, Pteroglossus, Picus, Picoides,

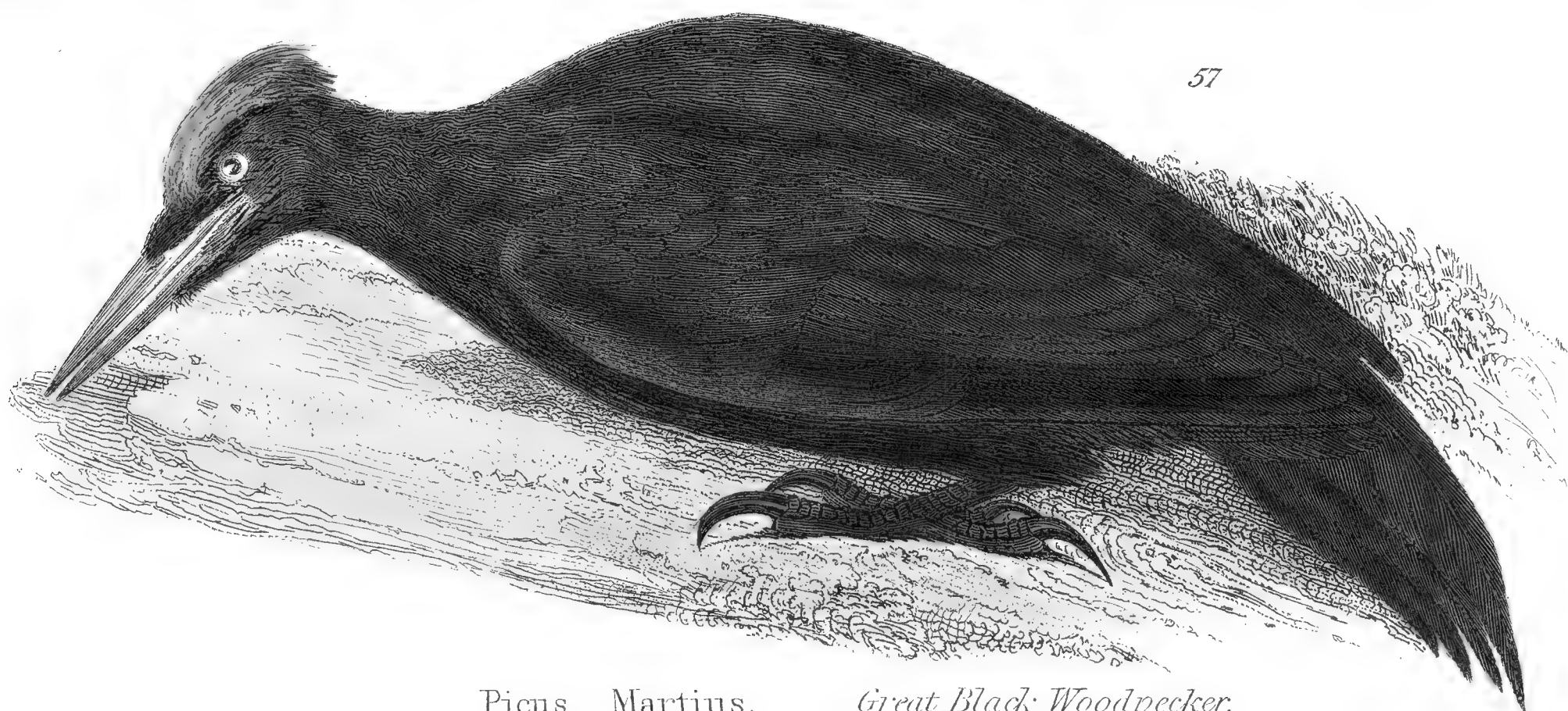
Families { Rhamphastidæ.  
Picidæ.



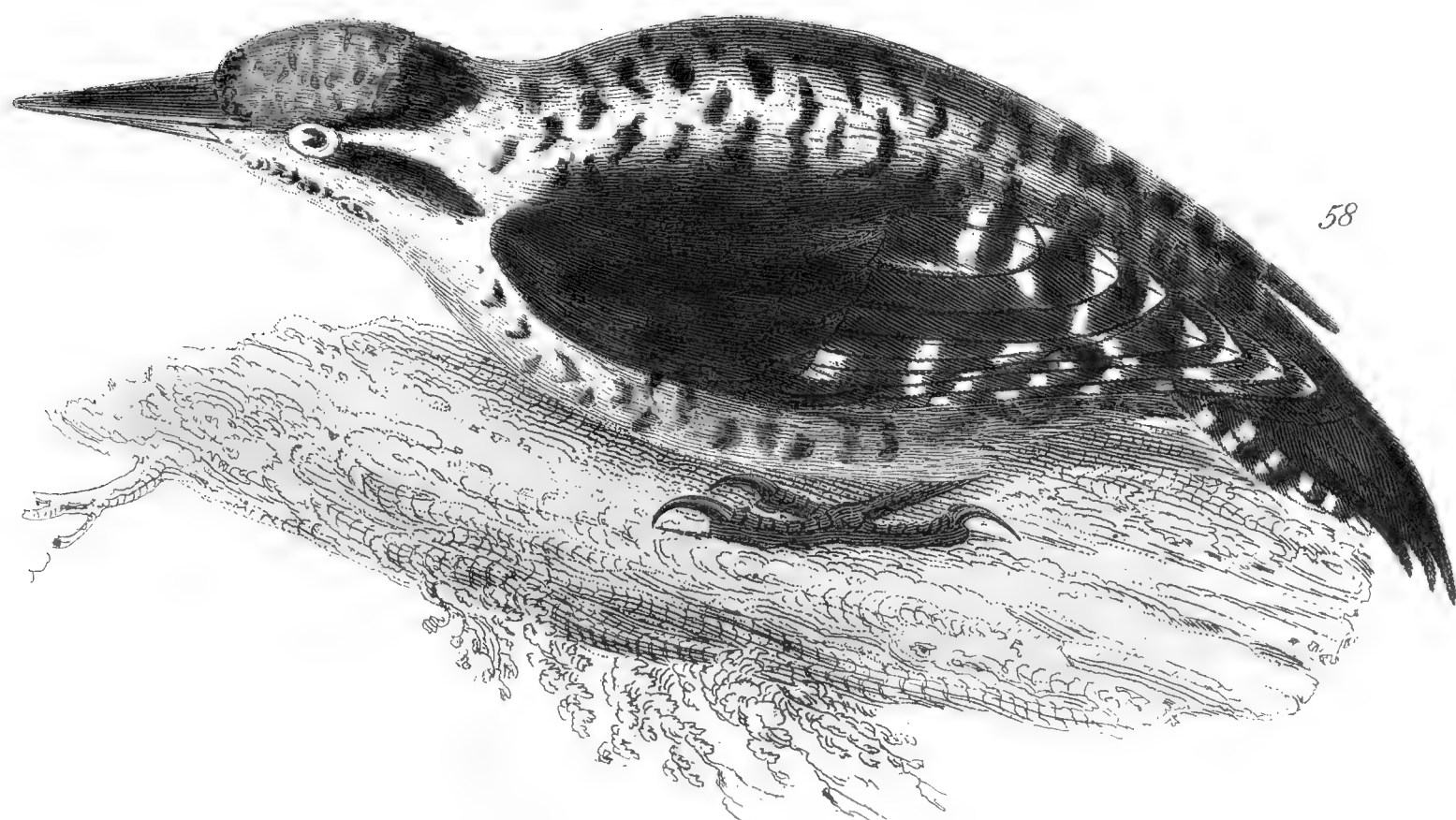
*Rhamphastos dicolorus.*—*Red breasted Toucan.*



*Pteroglossus aracari.*—*Aracari.*



*Picus Martius.*      *Great Black Woodpecker.*



*P. Tridactylus.*      *Southern three-toed Woodpecker.*





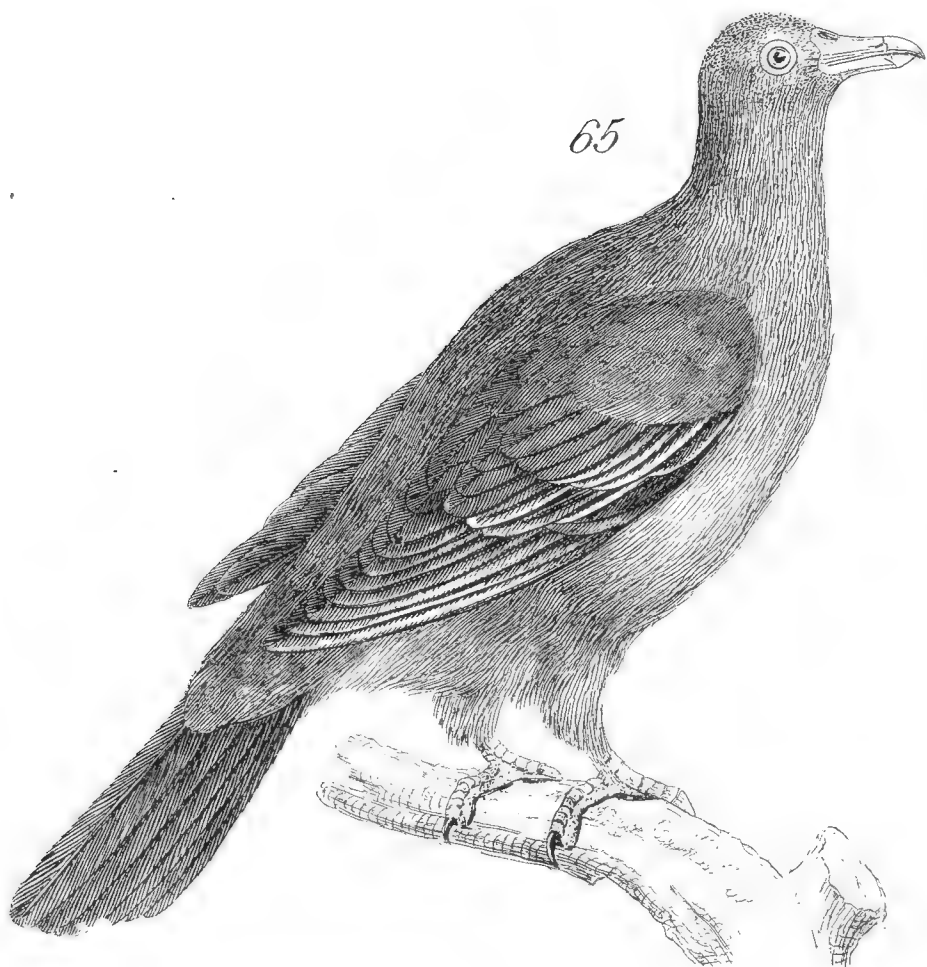
Order: Columbæ.  
Gallinæ.

Genera. Treron. Goura. Gallus. Cериornis.

Family. Columbidae.  
Phasianidae.



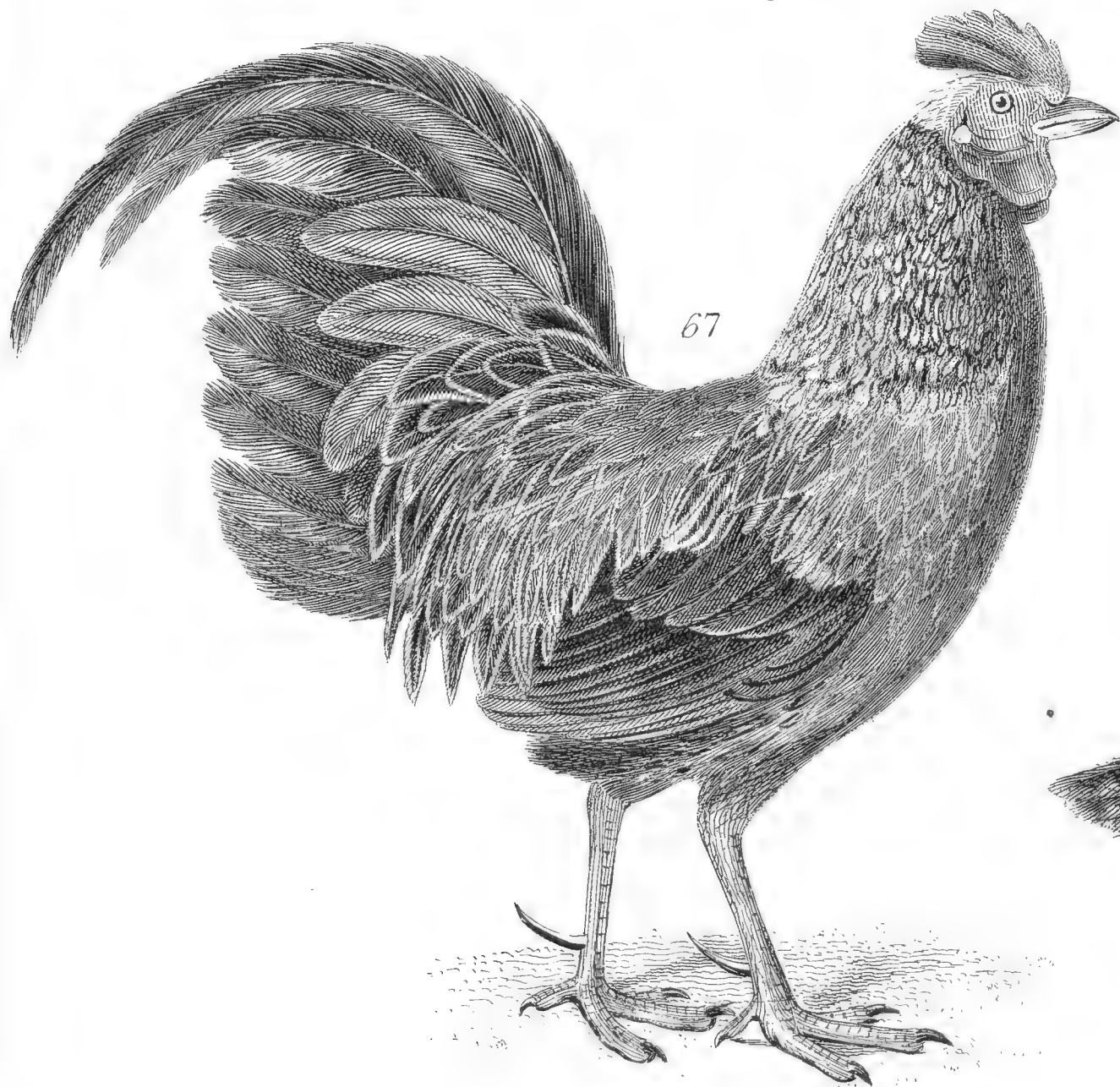
T. Abyssinica. *Waalia Pigeon.*



T. Sieboldii. *White-booted Pigeon.*



G. Coronata. *Crowned Pigeon.*



G. Bankivus. *Domestic Cock.*



C. Satyras. *Nepal Horned Pheasant.*





Order. Cursores

Genera. Struthio, Rhea, Casuarius.

Family. Struthionidæ.



S. Camelus. *Ostrich*.



R. Americana. *Nandu*.



C. Galeatus. *Cassowary*.





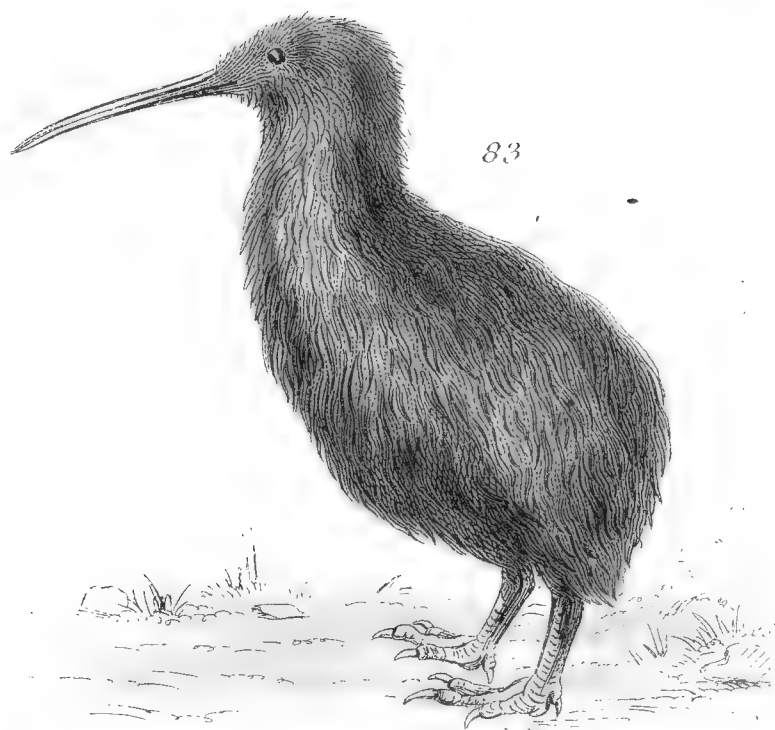
Order. Cursores Grallæ.

Genera. Dromaius, Apteryx, Otis, Œdienemus,

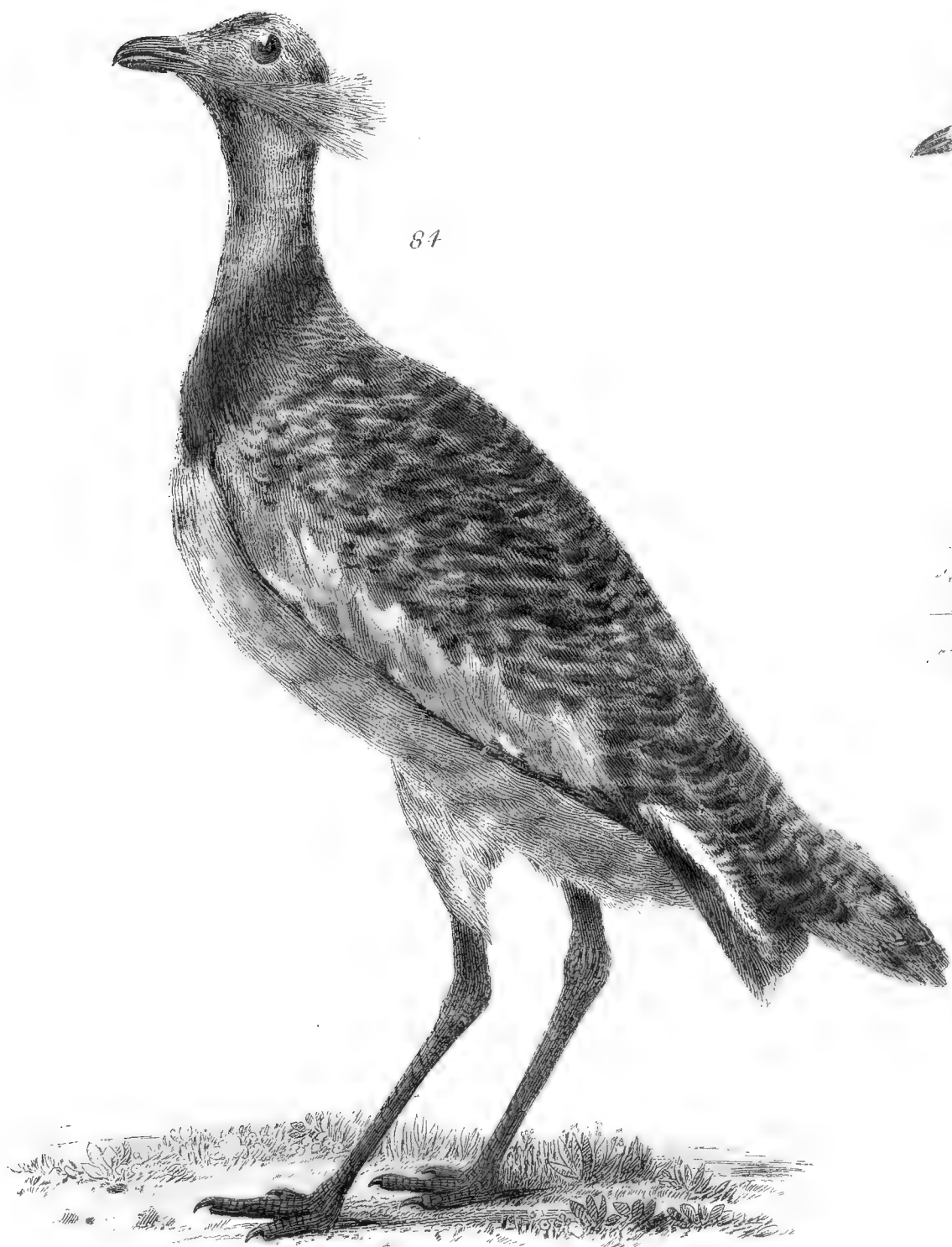
Families { Struthionidæ.  
Apterygidæ.  
Otididæ.  
Charadriidæ.



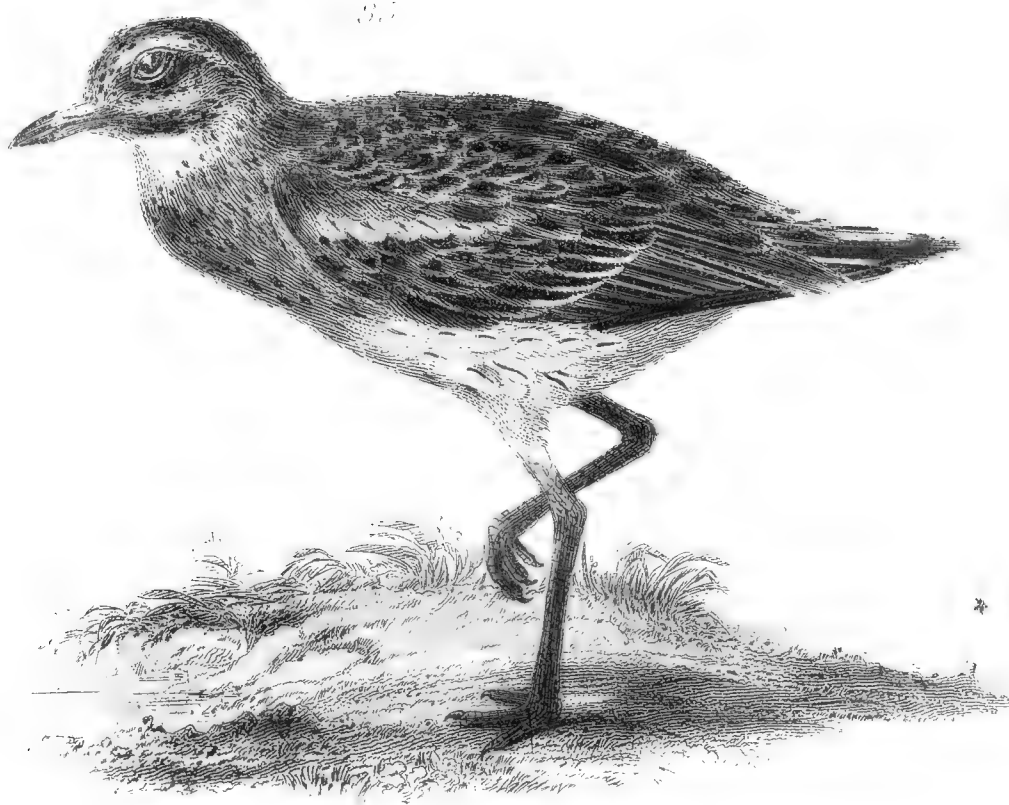
D. Novæ Hollandiæ. ——— *Emu.*



Apteryx Australis — *Shaw's Apteryx.*



O. Tarda — *Great Bustard.*



Œ. Crepitans — *Common Thick-knee.*

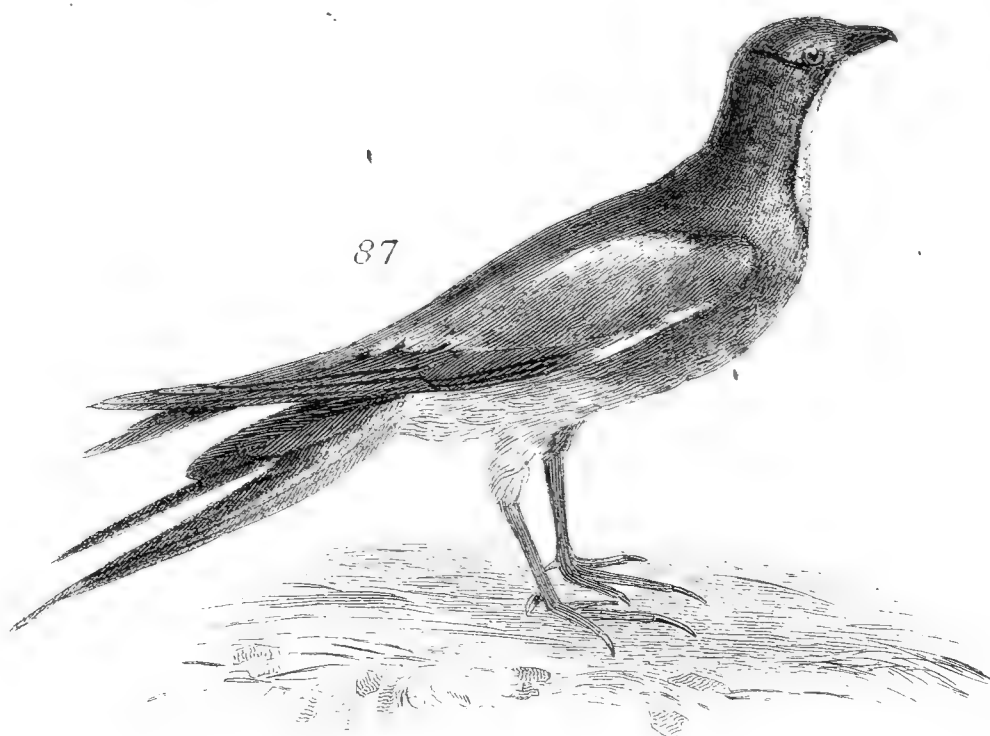
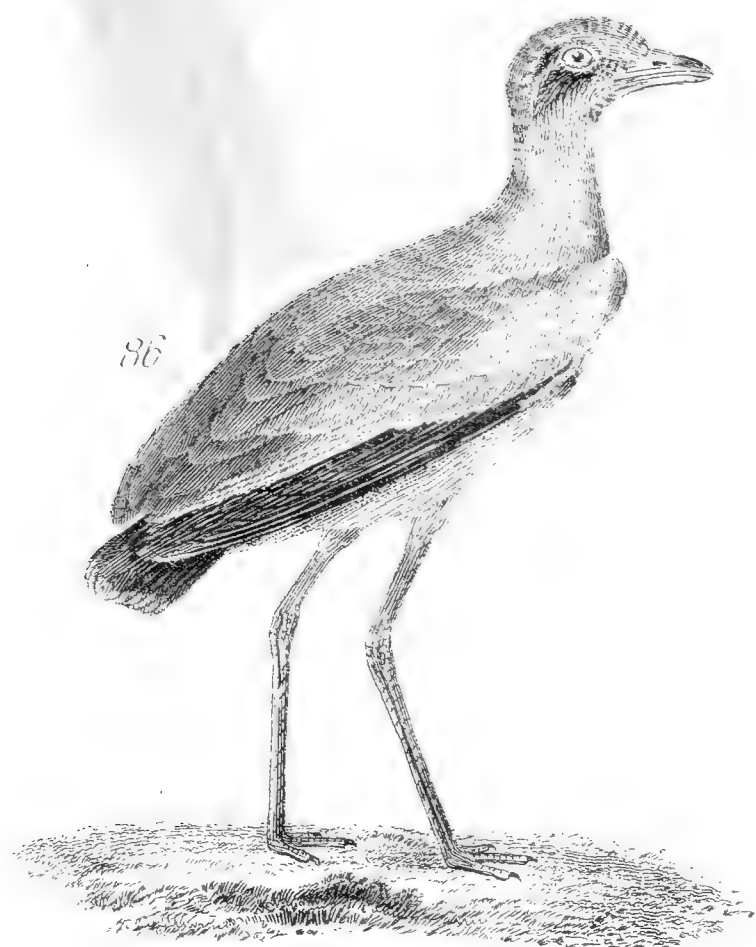
*J. W. Lowry sculp.*



Order: Grallæ

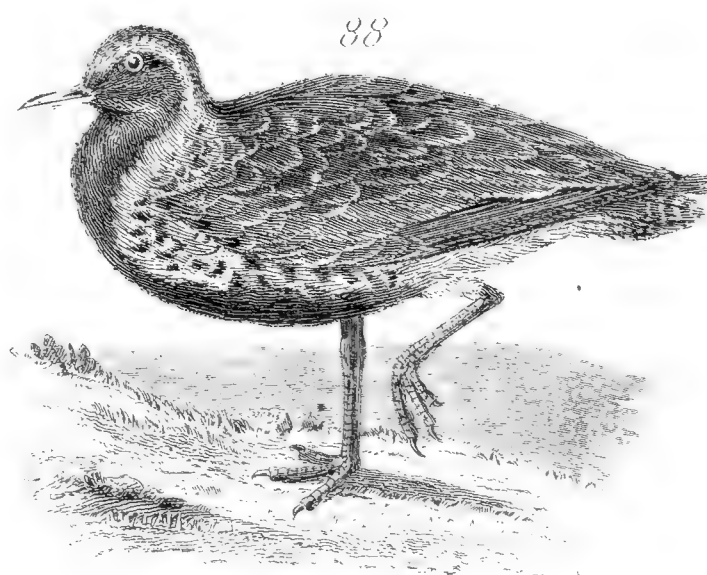
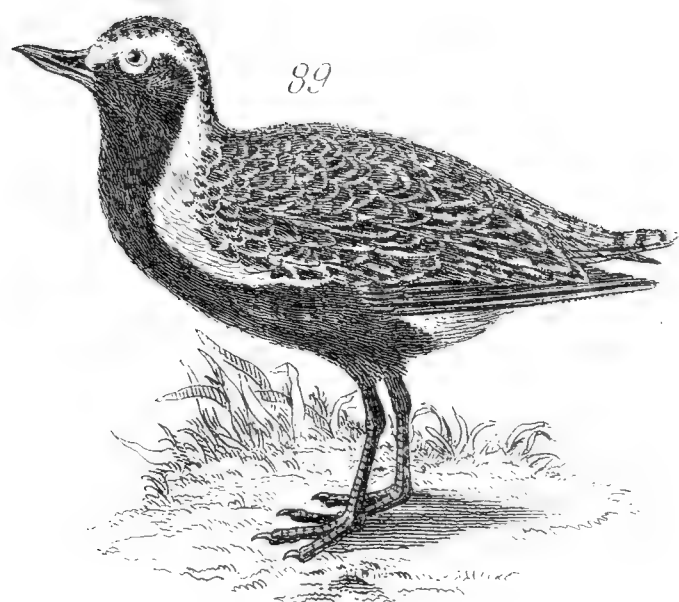
Families { Charadriidæ.  
Griudæ.

Genera, Cursorius, Glareola, Charadrius, Squatarola, Hæmatopus, Cariama.



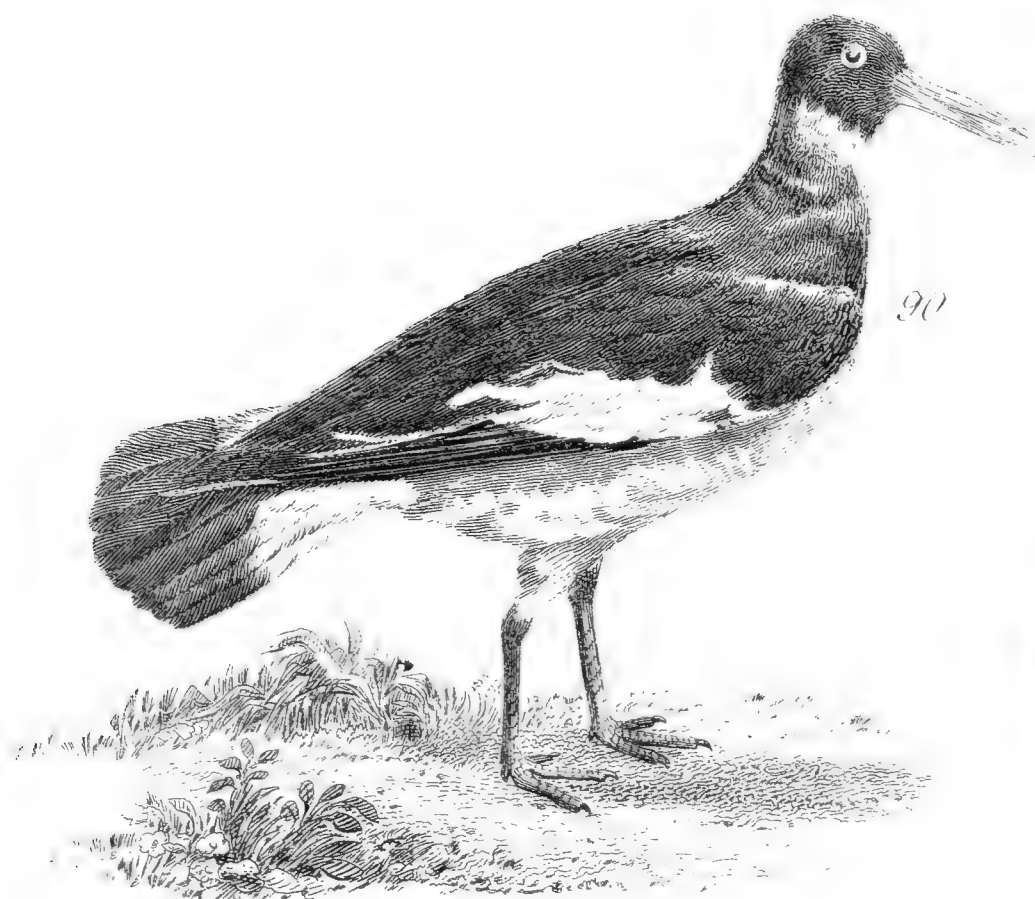
G. Torquata. *Collared Plover*.

Cur. Chalcopterus. — *Brazen winged Courser*.



Char. Phuvialis. — *Golden Plover*.

S. Helvetica. — *Grey Sand piper*.



H. Ostralegus. — *Pied Oyster catcher*.



C. Cristata. — *Maregrave's Cariama*.





Order. Grallæ.

Genera. Ardea, Botaurus, Cancroma.

Family. Ardeidæ.



*A. cinerea*. — Common Heron.



*Ardea egretta*. Great Egret.



*Botaurus stellaris*. Bittern.



*C. Cochlearia*. boat Bill.



Order. Grallæ.

Genera. Anastomus, Scopus, Tantalus.

Family. Ardeidæ.



100

S. Umbretta. — Tufted Umbre.



99

A. lamelligerus. — Madagascar open bill.



101

T. lacteus. — Milky Ibis



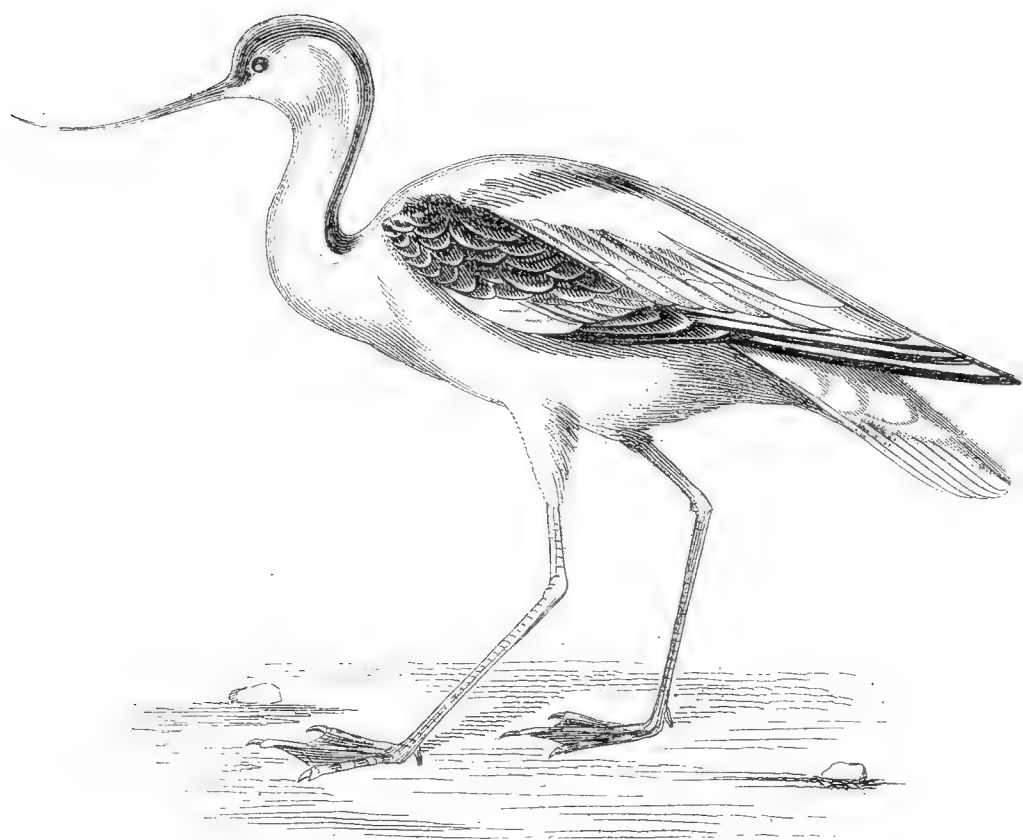


Order. Grallæ.

Genera. Recurvirostra Scolopax, Parra.

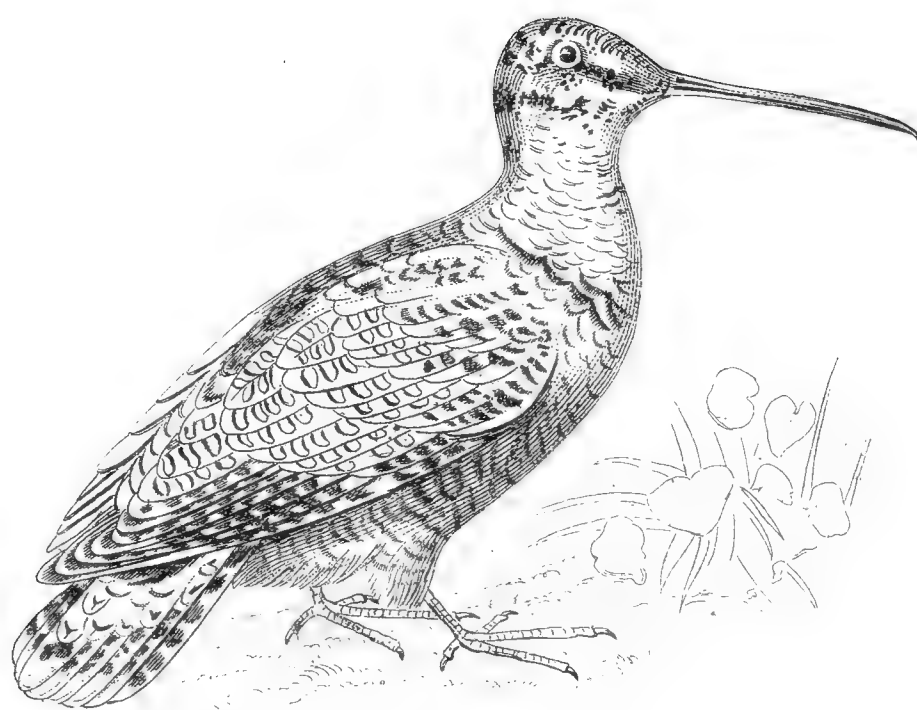
Families

Scolopaciæ.  
Palamediciæ



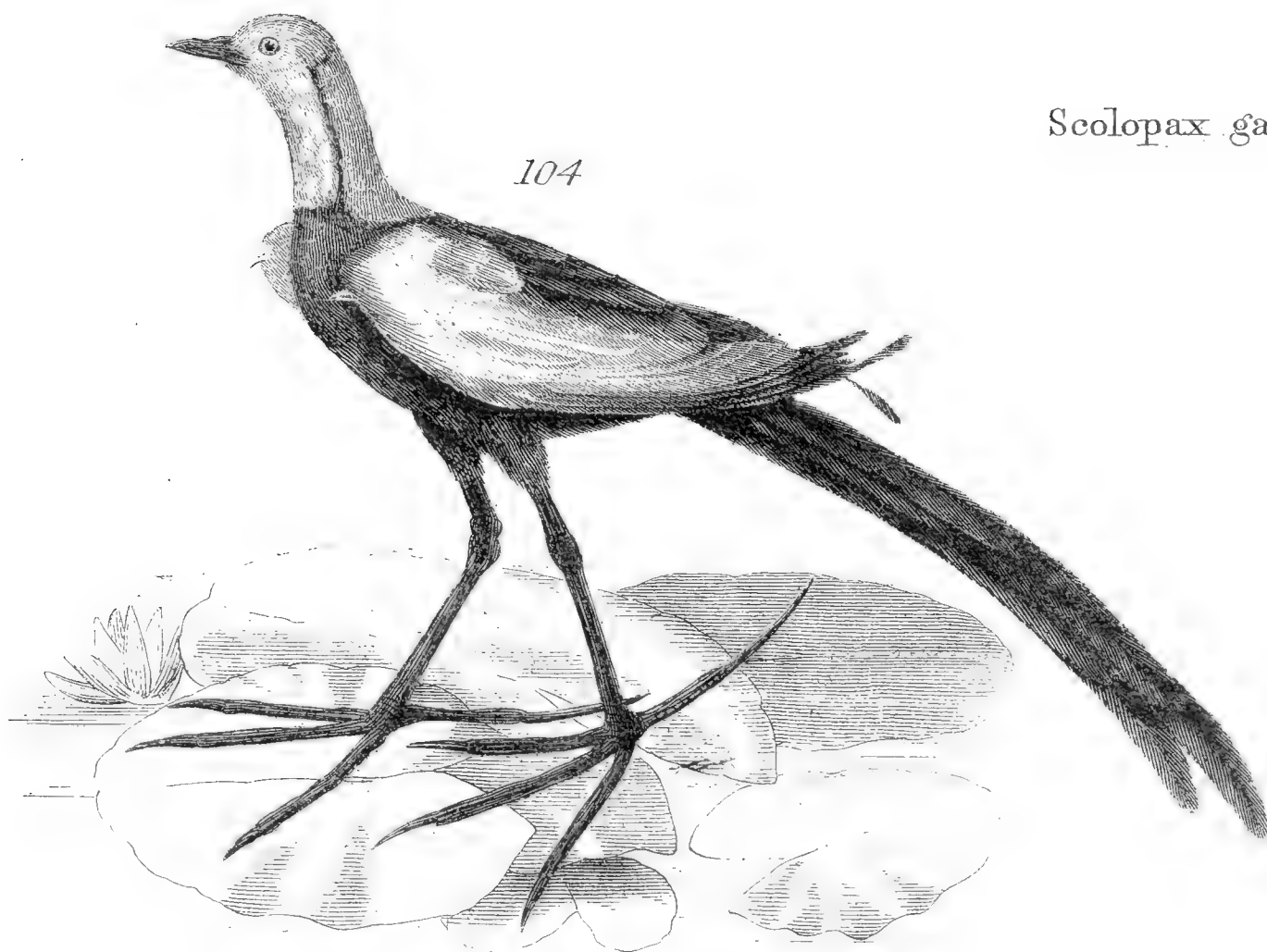
102

Recurvirostra avocetta.—*Avocet*



103

Scolopax gallinago.—*Common Snipe*.



104

Parra sinensis.—*Chinese Jacana*.



# BIRDS

Order: Grallæ.

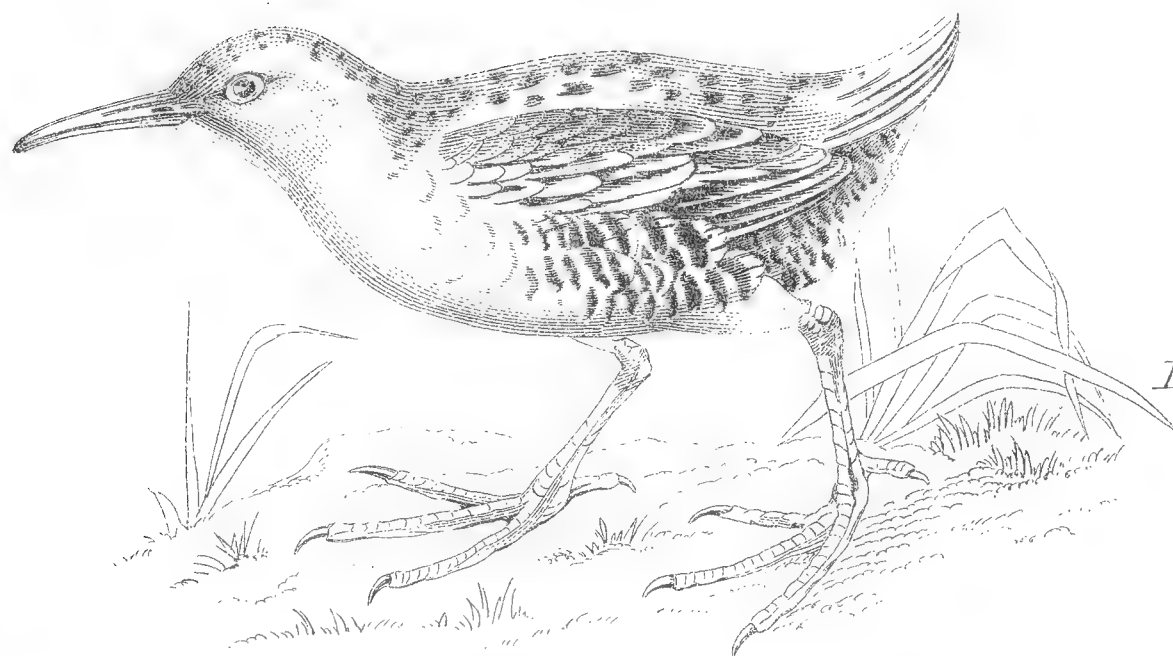
Genera. Palamedea, Rallus, Porphyrio, Gallinula

Families {  
Palamedidæ.  
Rallidæ.



105

Palamedea cornuta...Horned Screamer.



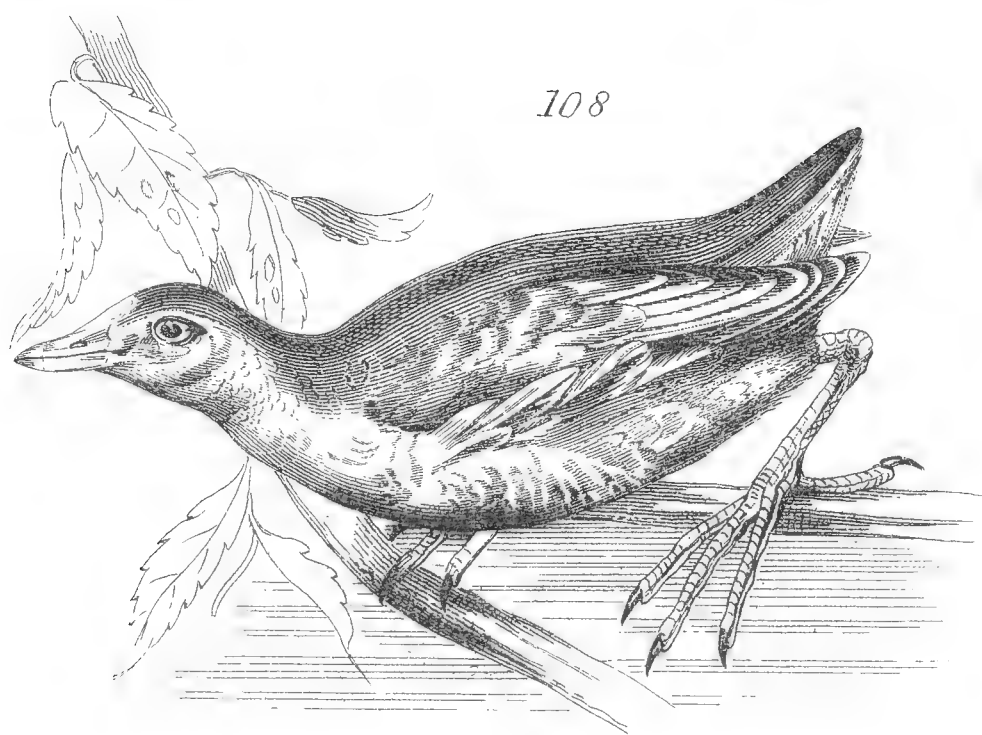
106

Rallus aquaticus — Water Rail.



107

Porph. Pulverulentus. Sultana-bird.



108

Gallinula. chloropus — Gallinule

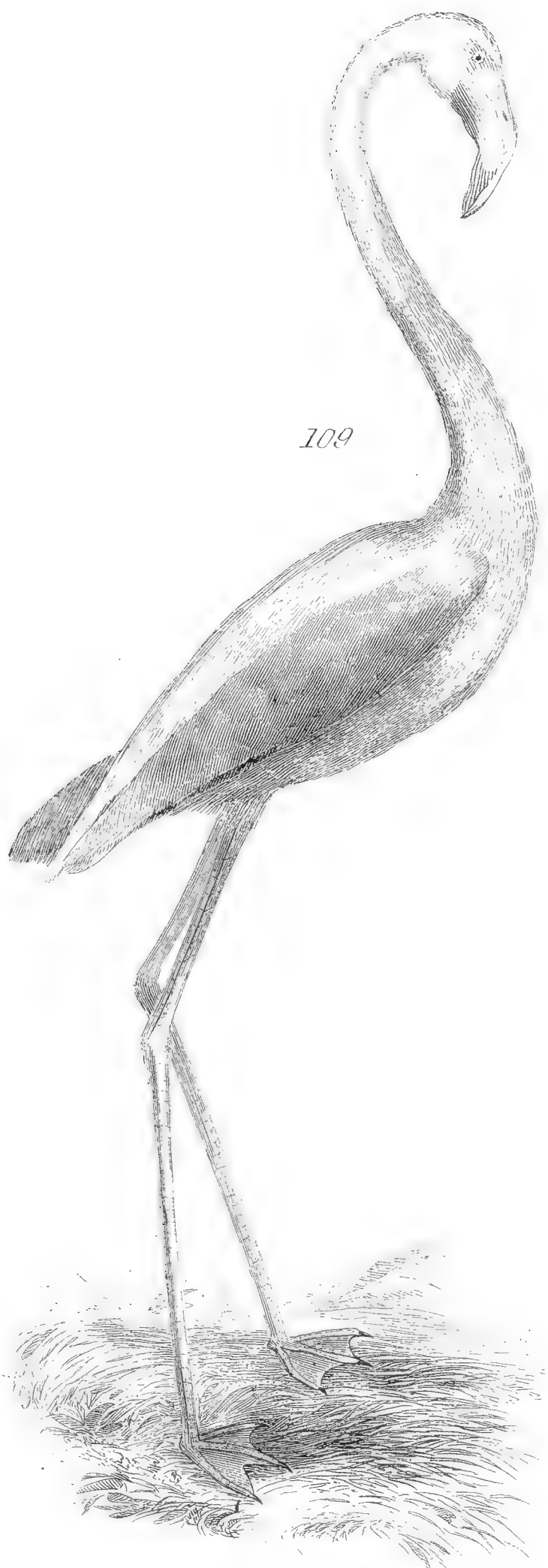




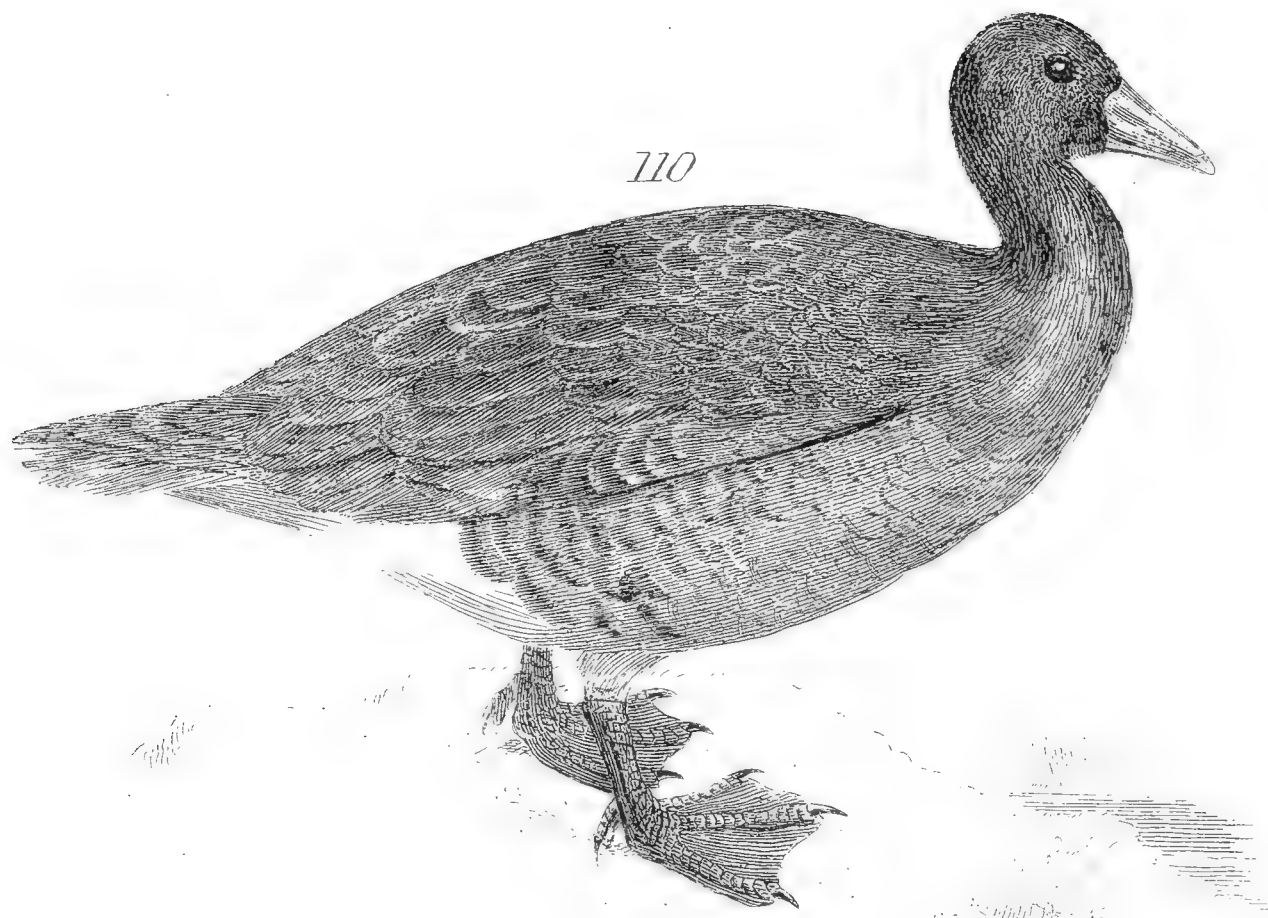
Order. Natatores.

Family. Anatidæ.

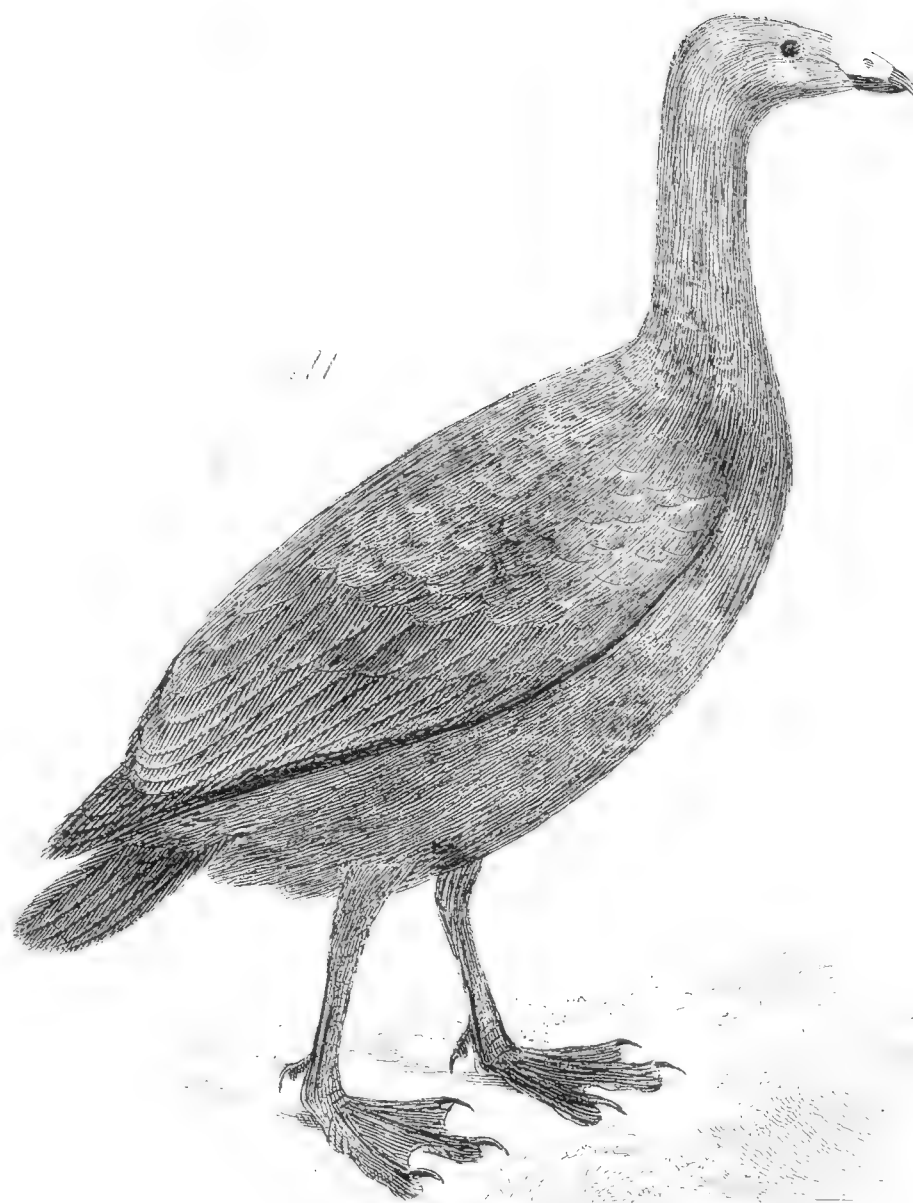
Genera Phœnicopterus, Anser, Cereopsis.



Phœnicopterus ruber. — *Red Flamingo.*



Ans. Ferus — *Wild Goose.*



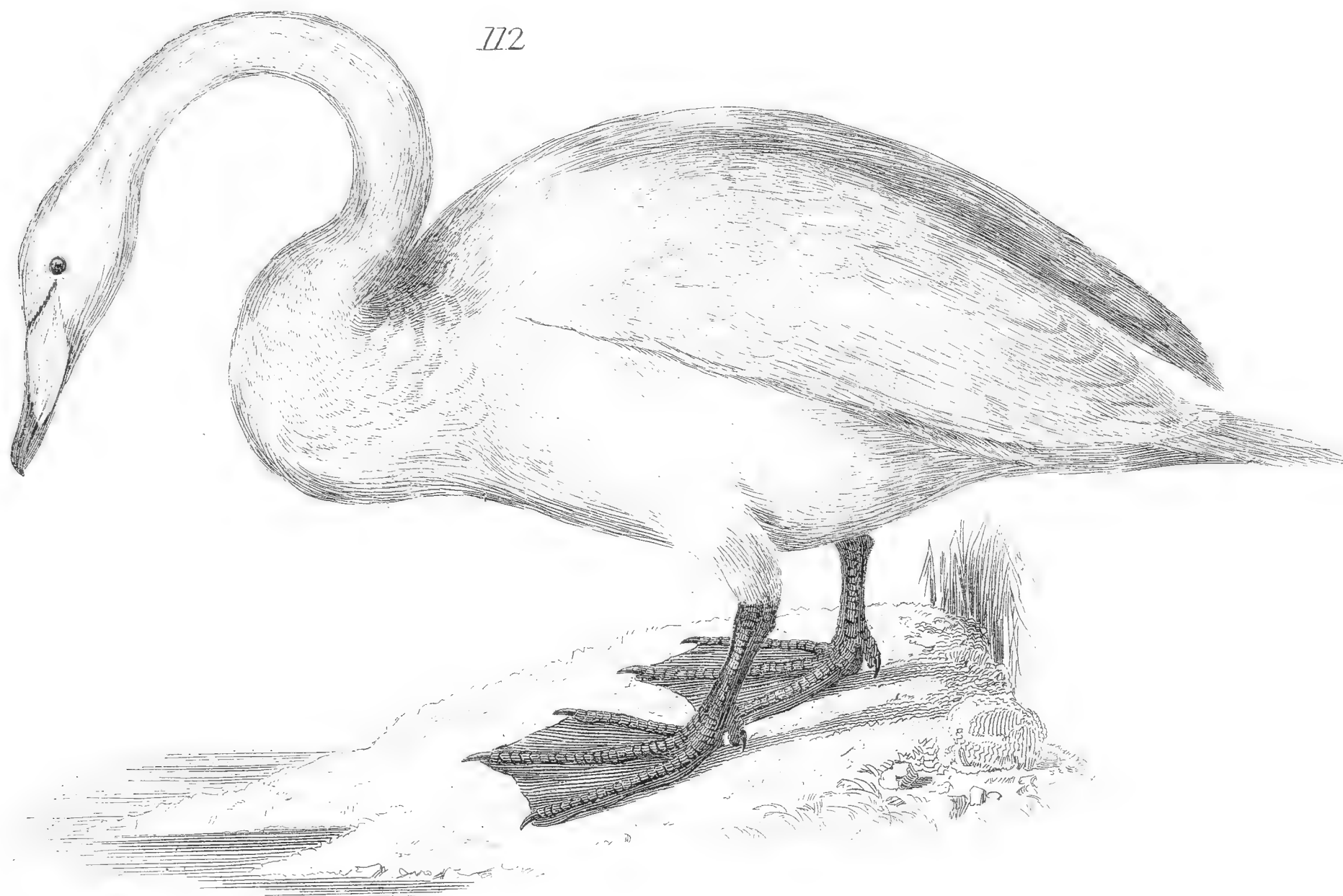
Cer. Novæ Hollandiæ — *New Holland Pigeon Goose*



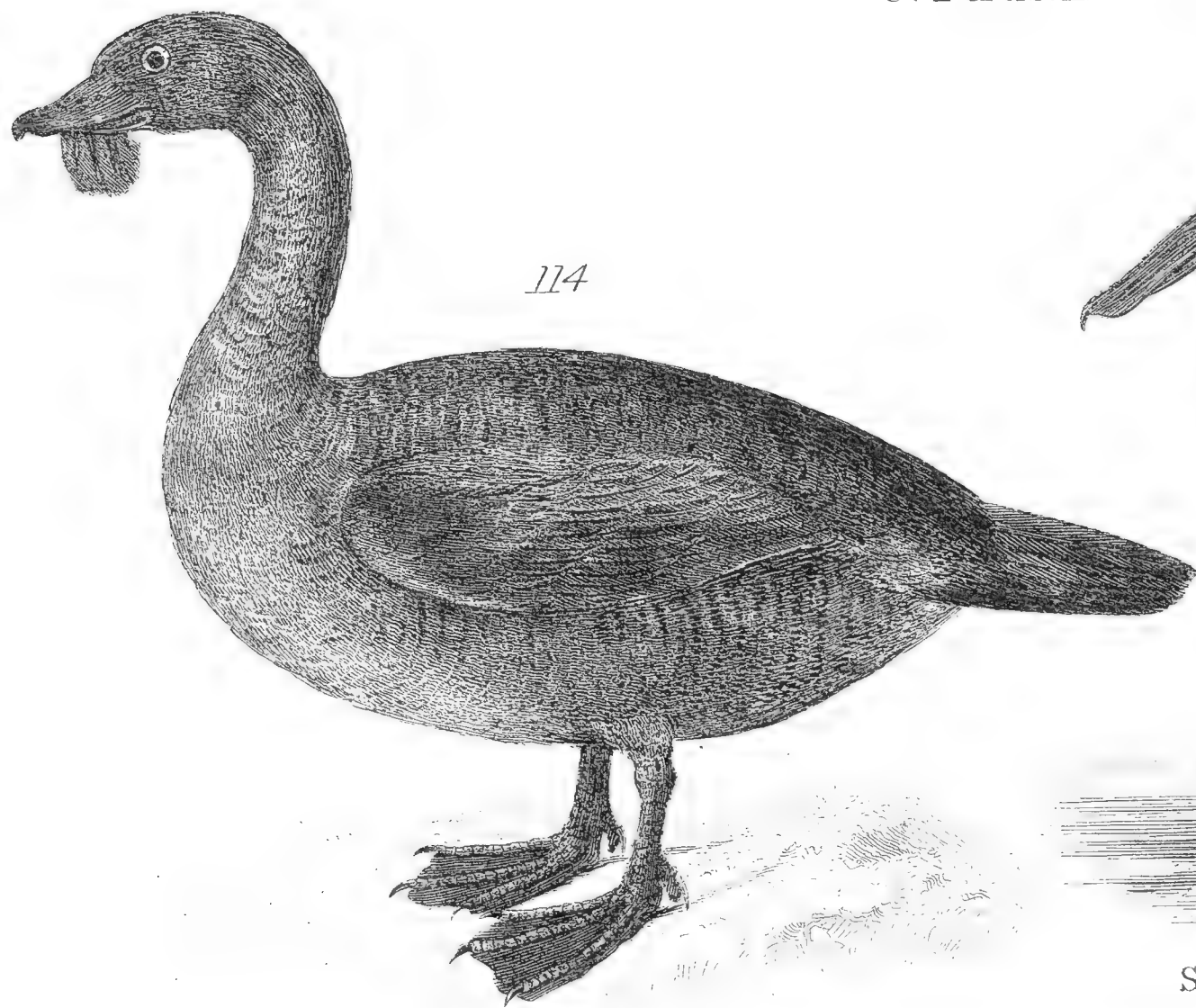
Order. Natatores.

Genera. Cygnus, Spatula, Hydrobates, Mergus.

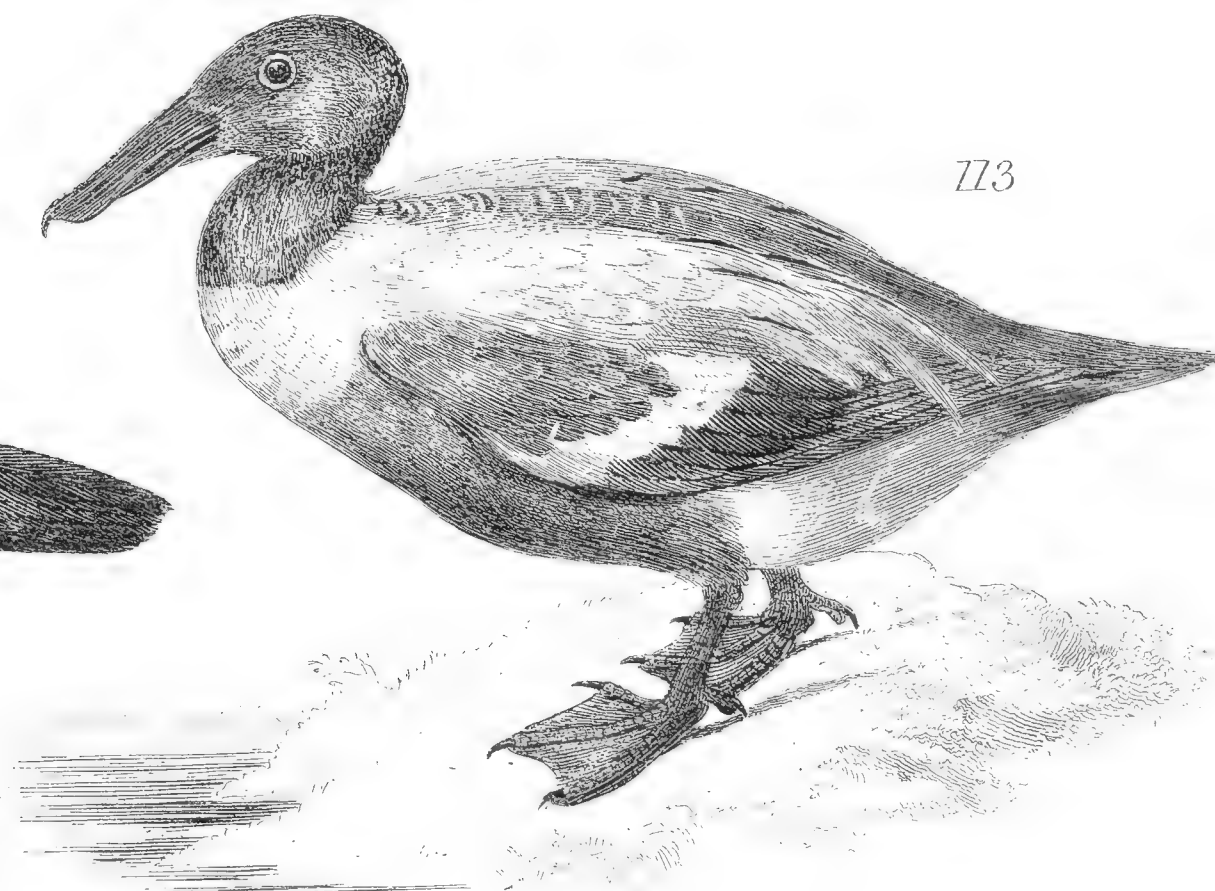
Family. Anatidæ.



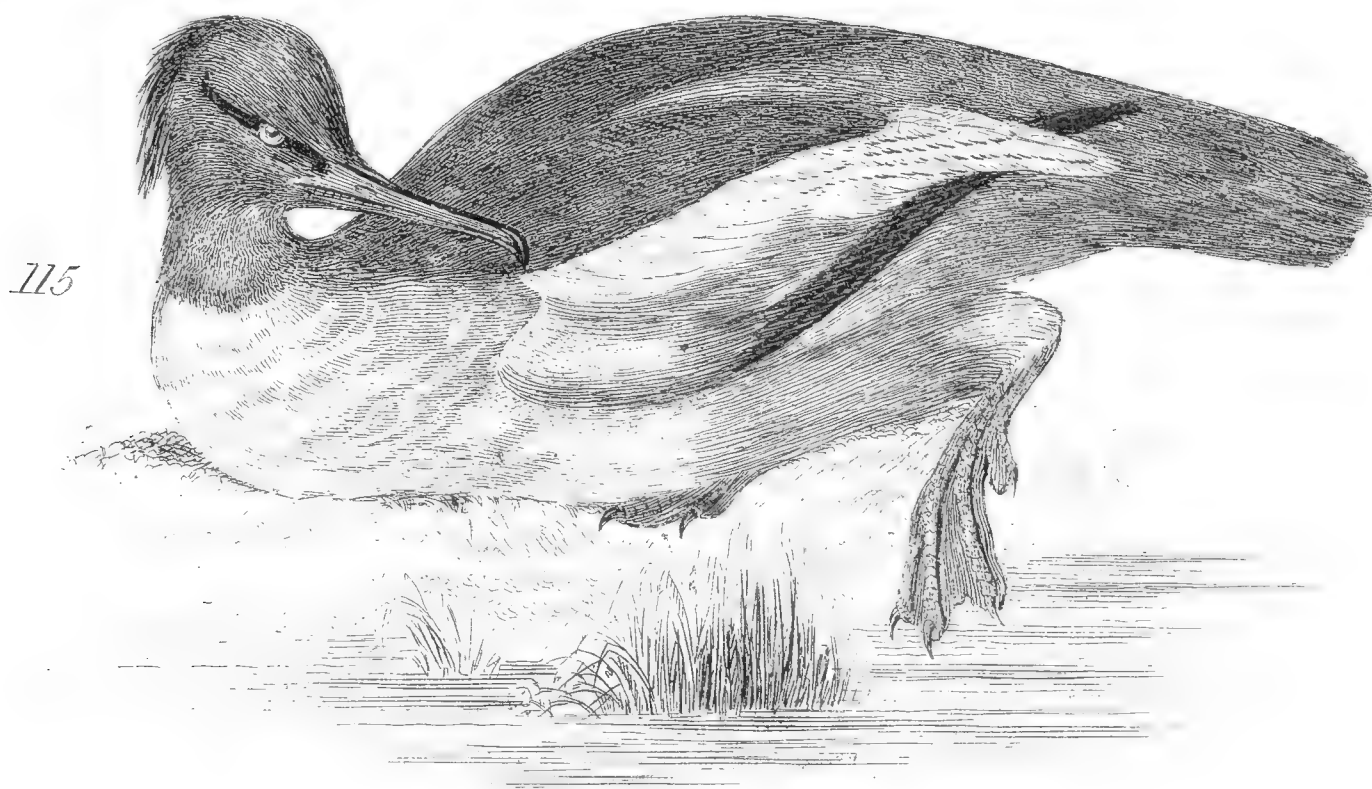
C. Ferus. — Wild Swan.



H. Lobatus — Lobated Duck.



Spatula clypeata — Shoveller.



Mergus Merganser — Goosander.

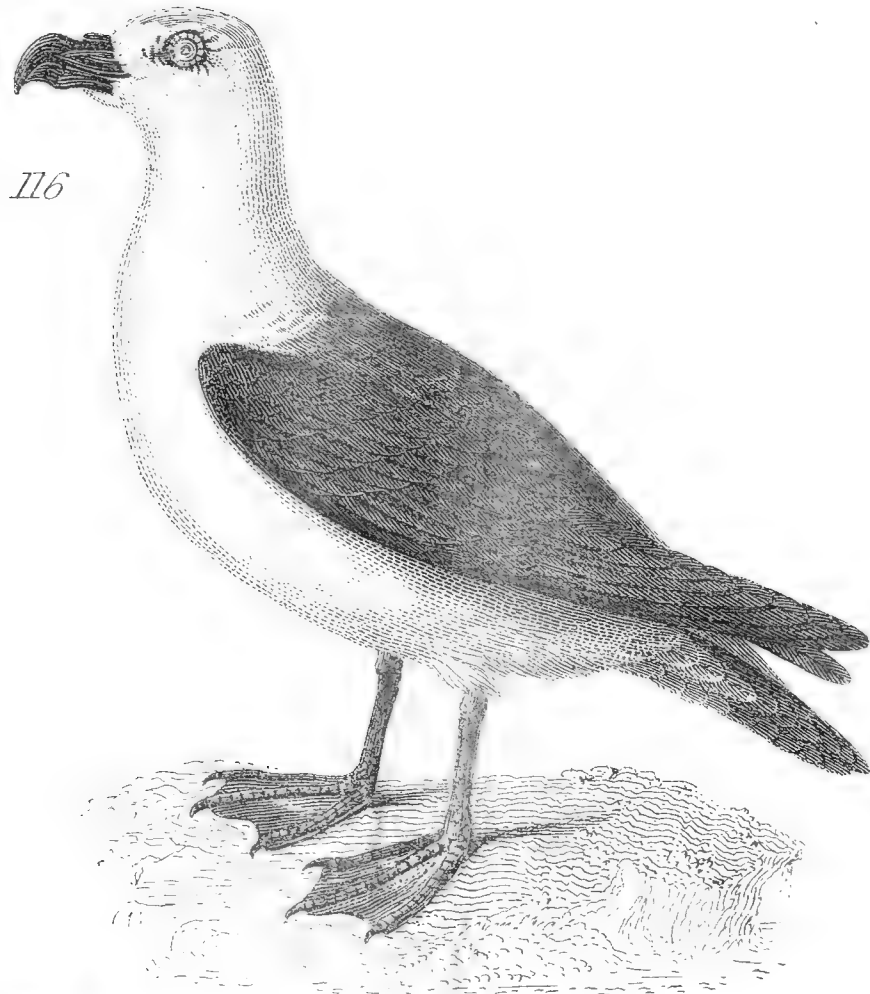




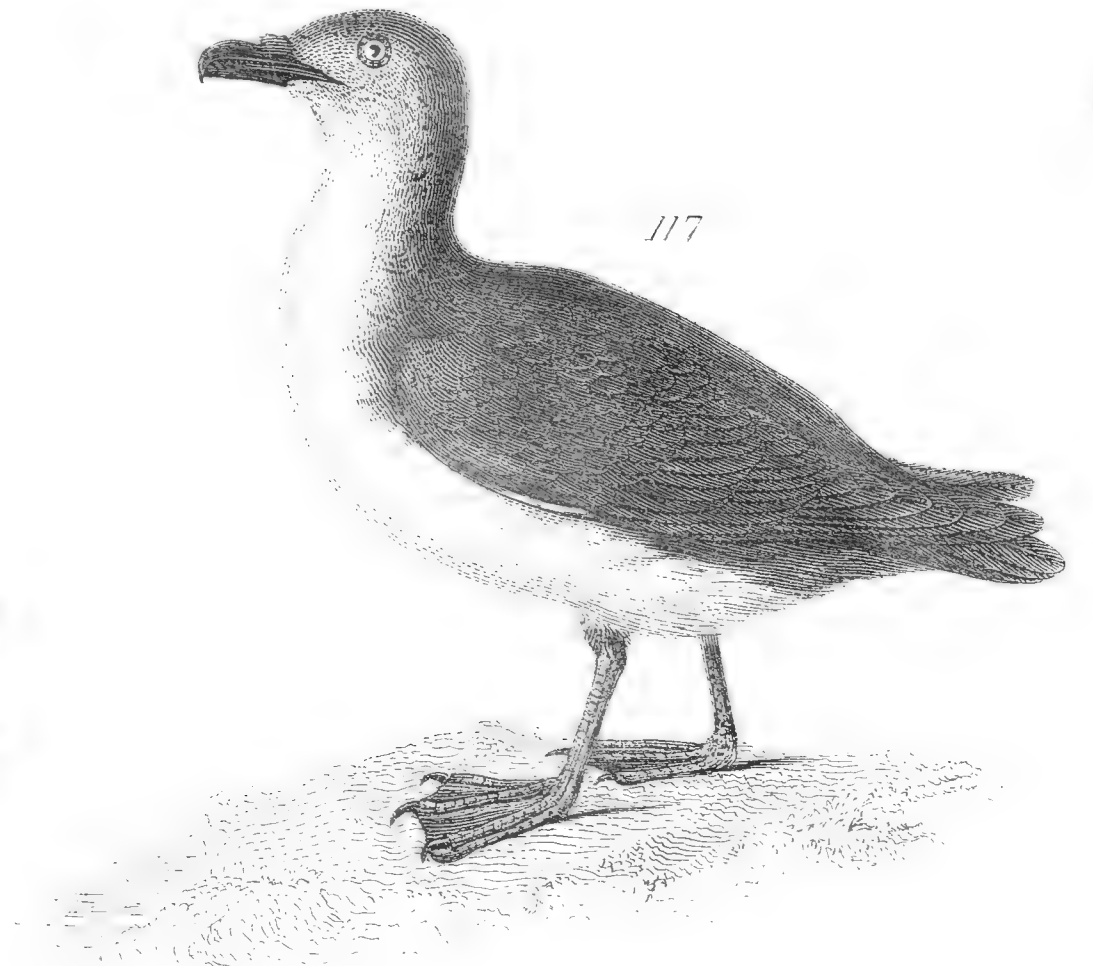
Order. Natatores.

Gen. Fulmarus, Prion, Diomedea

Family. Procellariæ.



116



117

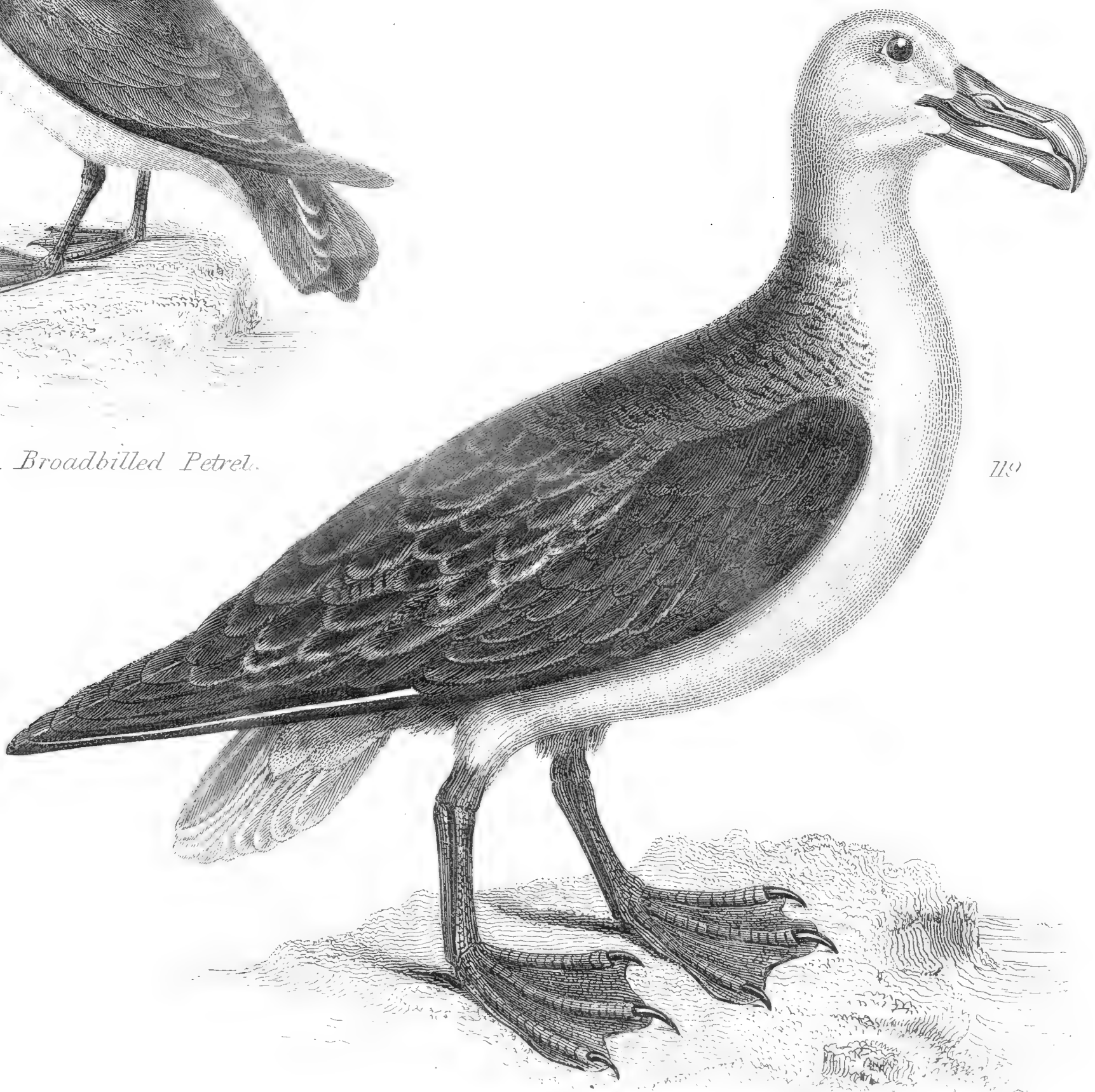
F. Glacialis. Fulmar Petrel.

F. Cookii — Cook's Petrel.



118

Prion vittatus. — Broadbilled Petrel.

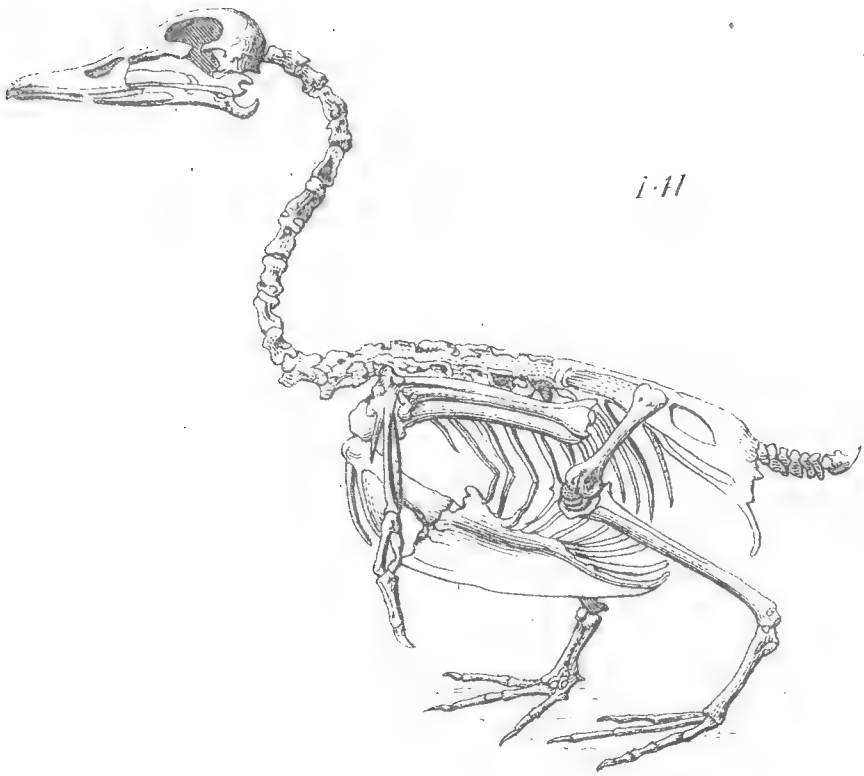


119

Diomedea exulans — Wandering Albatross.

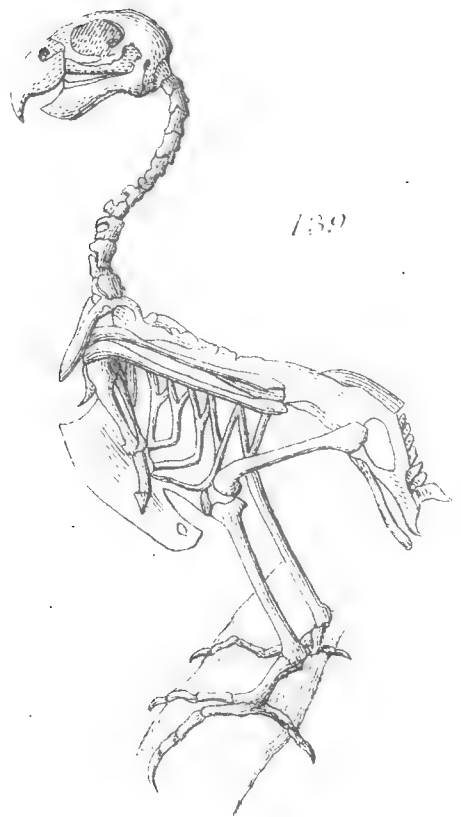


SKELETONS BIRDS



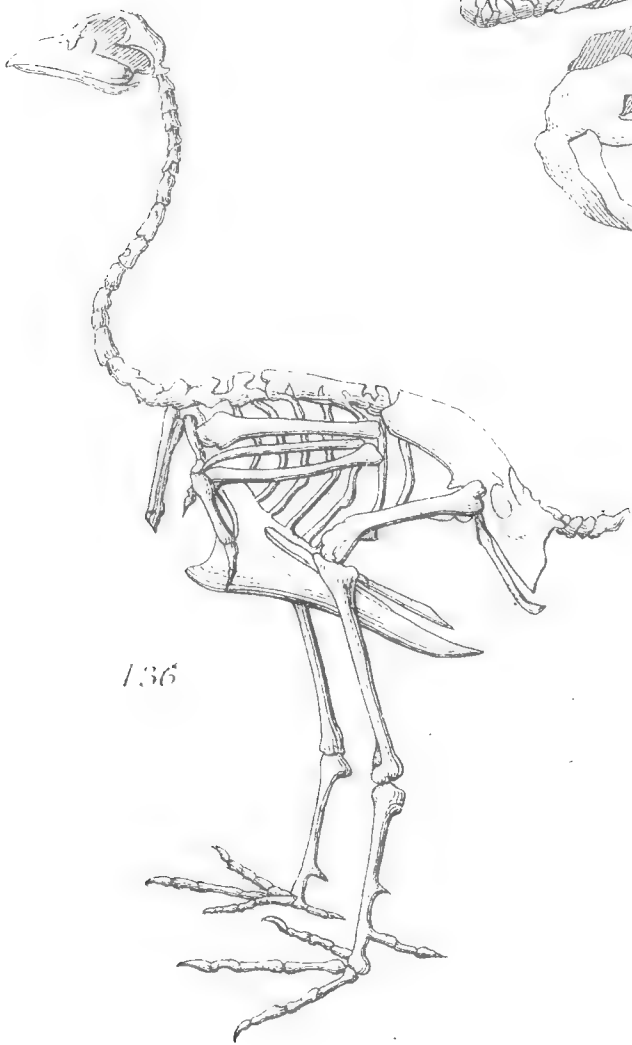
134

*Anas boschas. Wild Duck.*



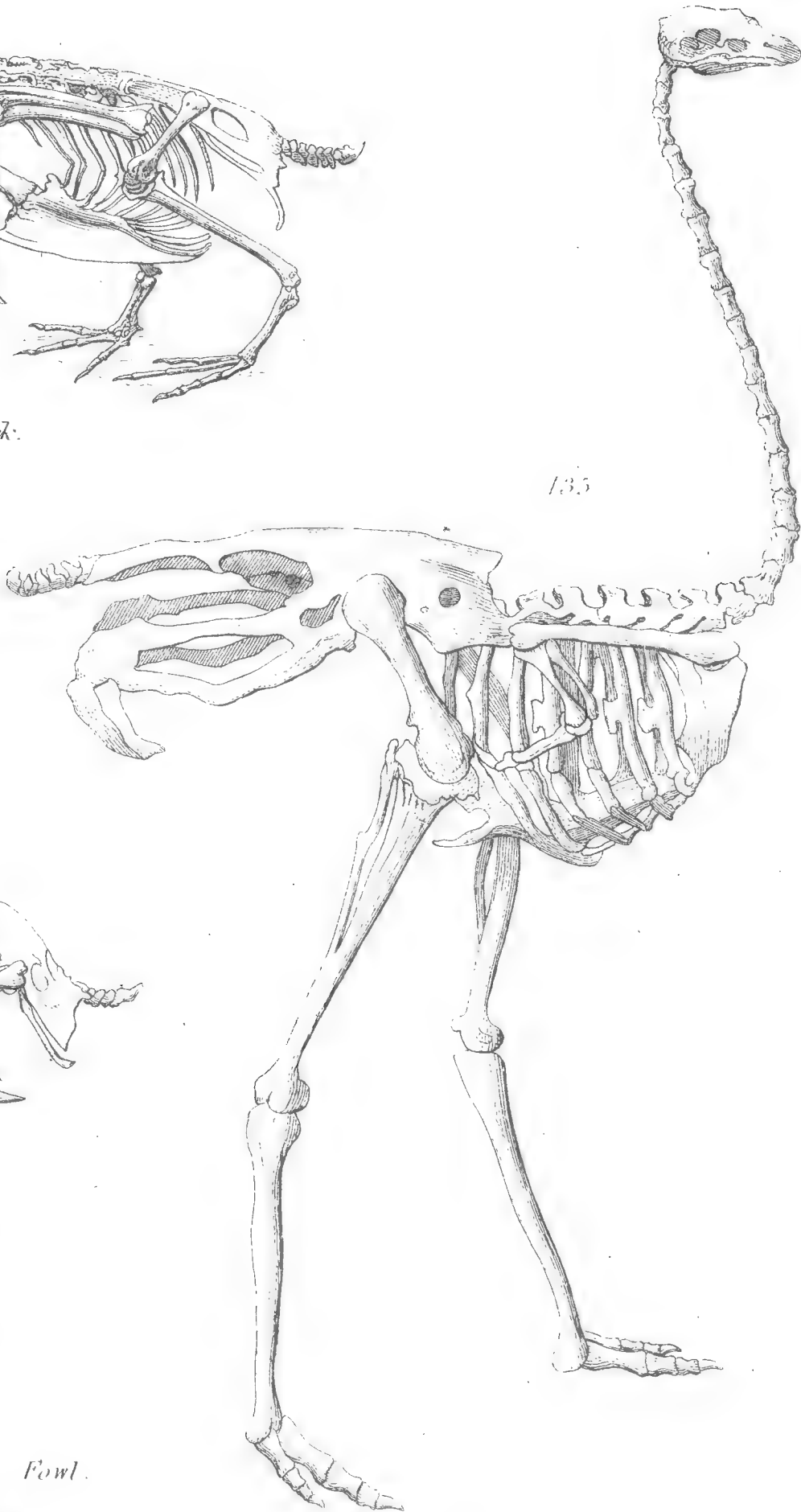
139

*Macrocerus macao. Macaw.*



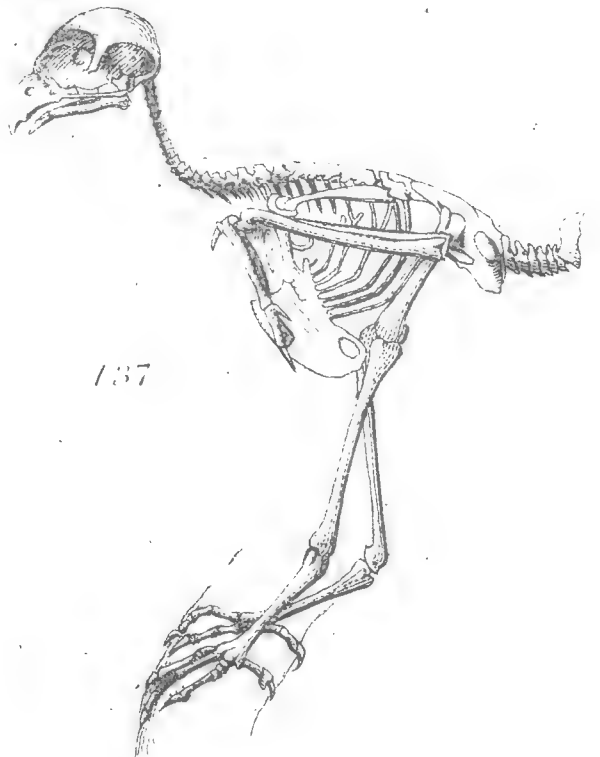
136

*Callus domesticus. Domestic Powl.*



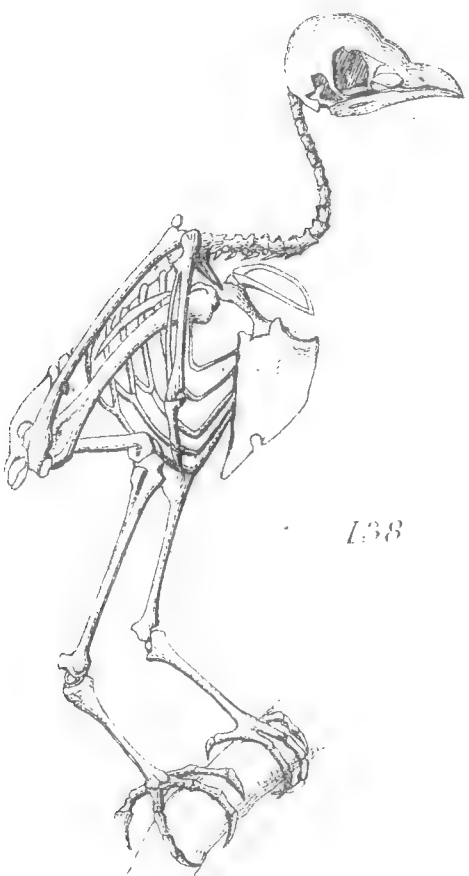
135

*Struthio camelus. Ostrich.*



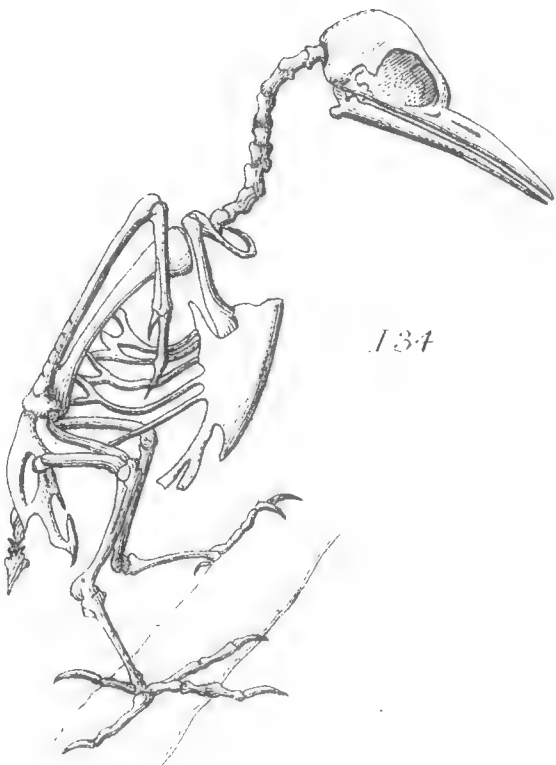
137

*Falco asalon. Merlin.*



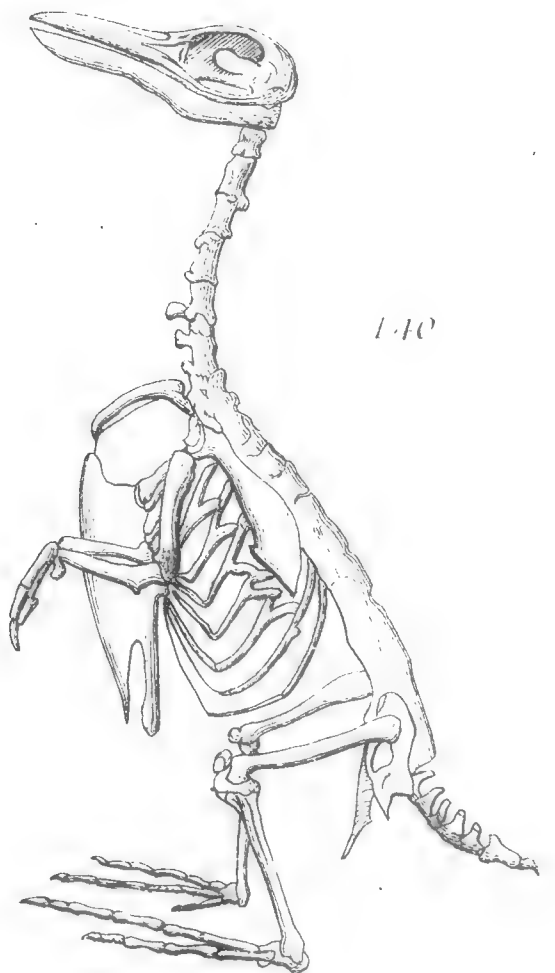
138

*Strix flammea. Barn Owl.*



134

*Geococcyx viridis. Green Woodpecker.*



140

*Eudyptes demersa. Jackass Penguin.*

105





Order. Quadrumana.

5



*M. Seniculus.*

6



*A. Paniscus Coaita.*

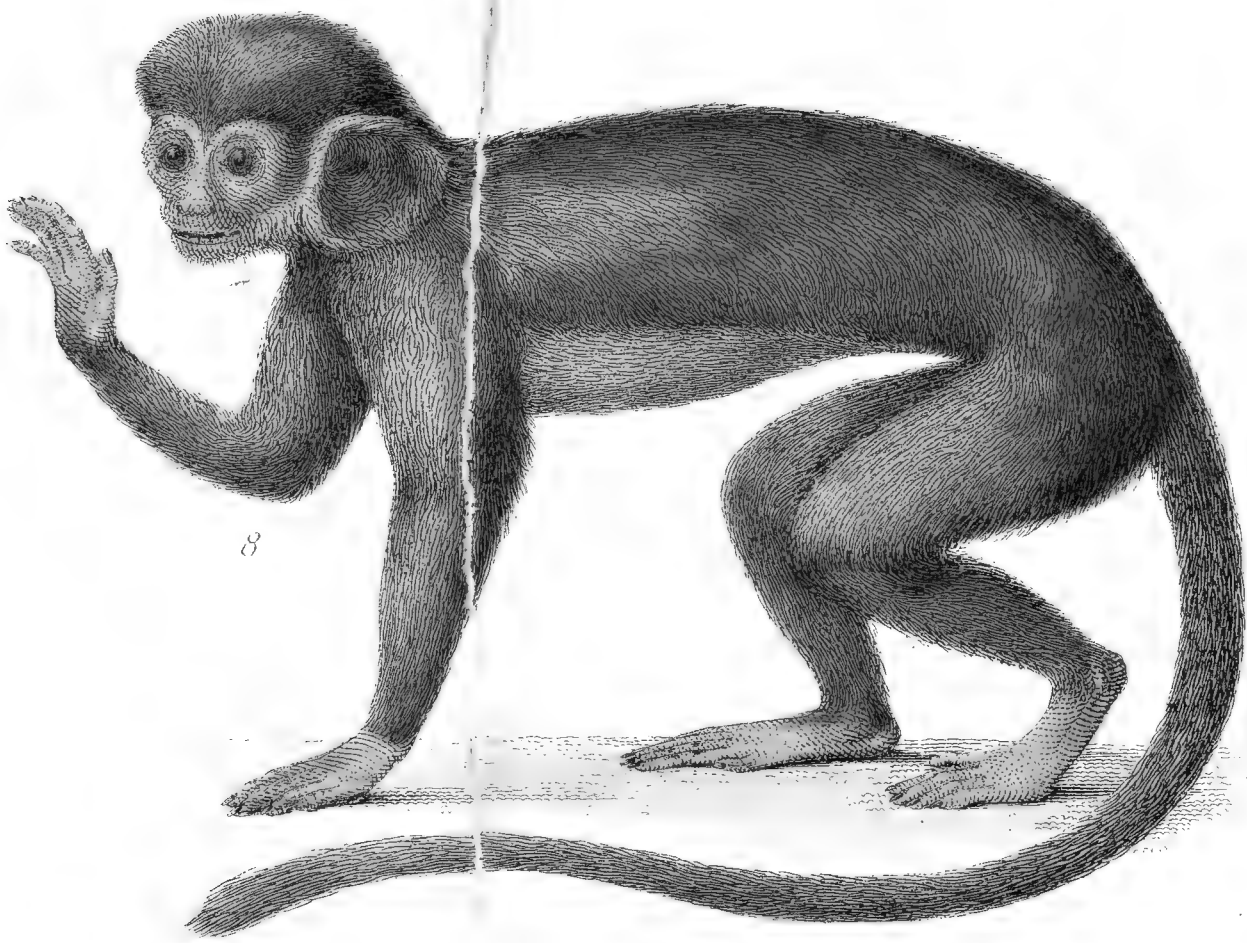


MAMMALIA.

Order. Quadrumana.

Genera. Calithrix, Jacchus, Lemur, Indris.

Families { Cebidæ.  
Hapalidæ.  
Lemuridæ.



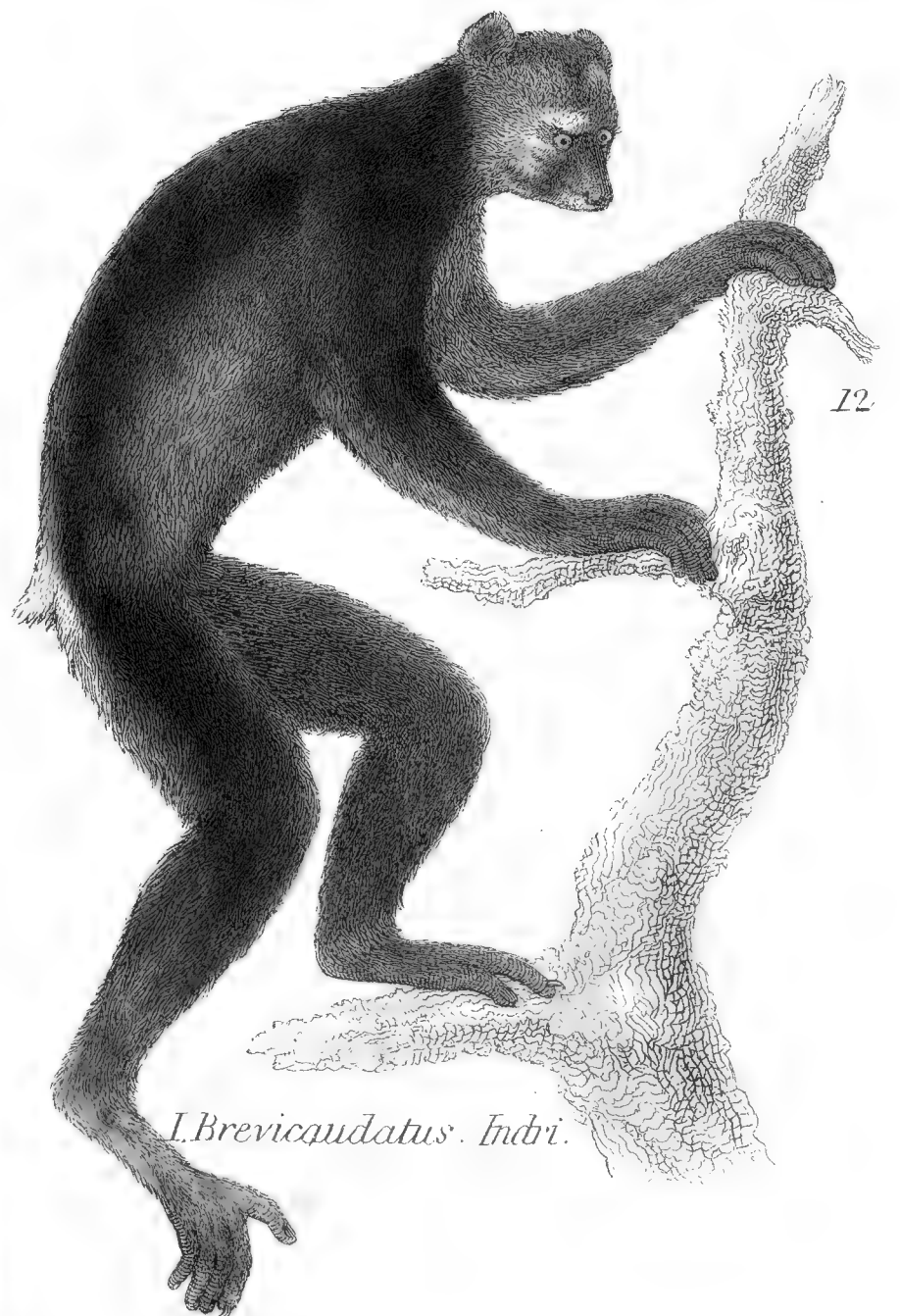
*Cal. Scurus. Squirrel Monkey.*



*J. Vulgaris. Common Marmoset.*



*L. Catta. Ring-tailed Macaque.*



*I. Brevicaudatus. Indri.*



*J. Rosalia. Marikina.*

J. Lowry Sculp.

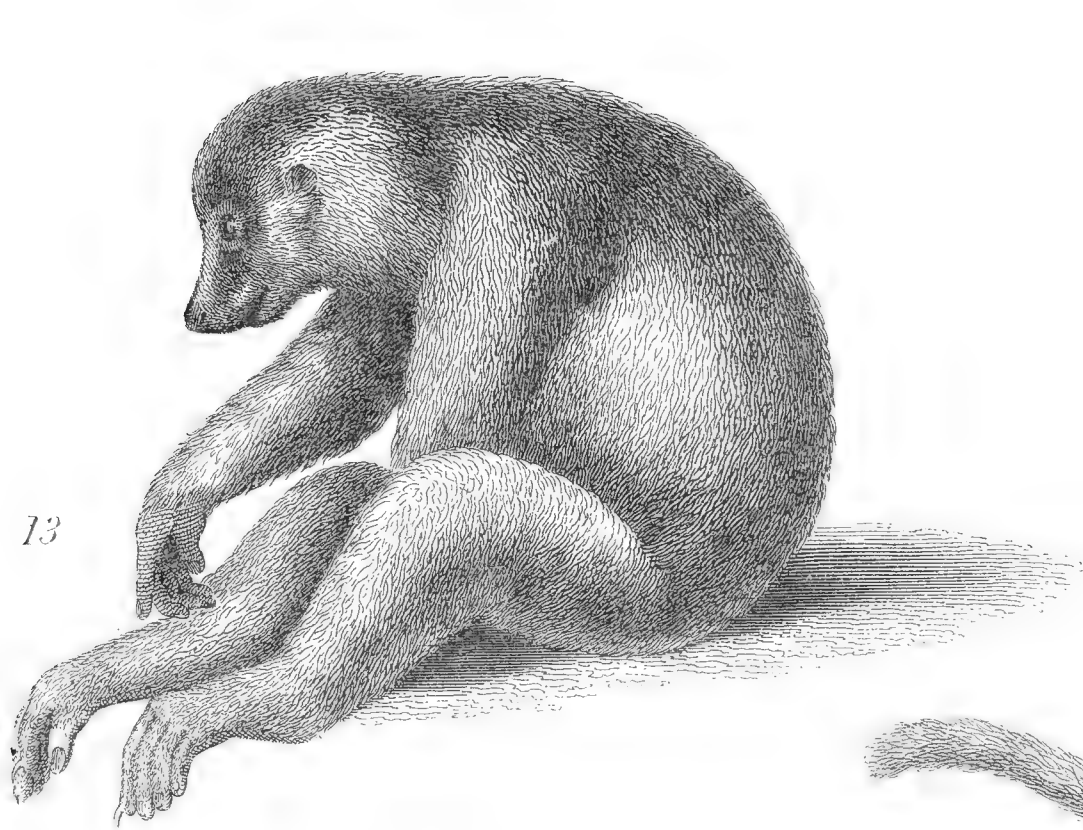




Order, Quadrumana.

Genera, Loris, Galago, Tarsius, Galeopithecus.

Families, { Nycticebidæ.  
Tarsiidæ.  
Galeopithecidæ.



13

*Lor. Gracilis Bengal Loris.*



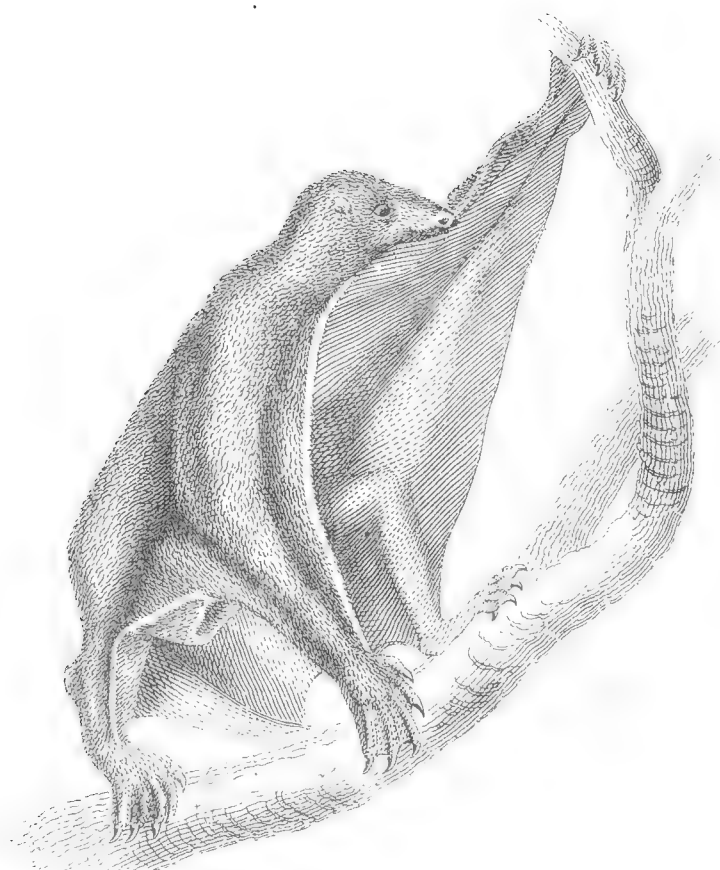
14

*Galago senegalensis. Senegal Galago.*



15

*Tarsius spectrum, Tarsier.*



16

*Galeopithecus volans, Flying Lemur.*

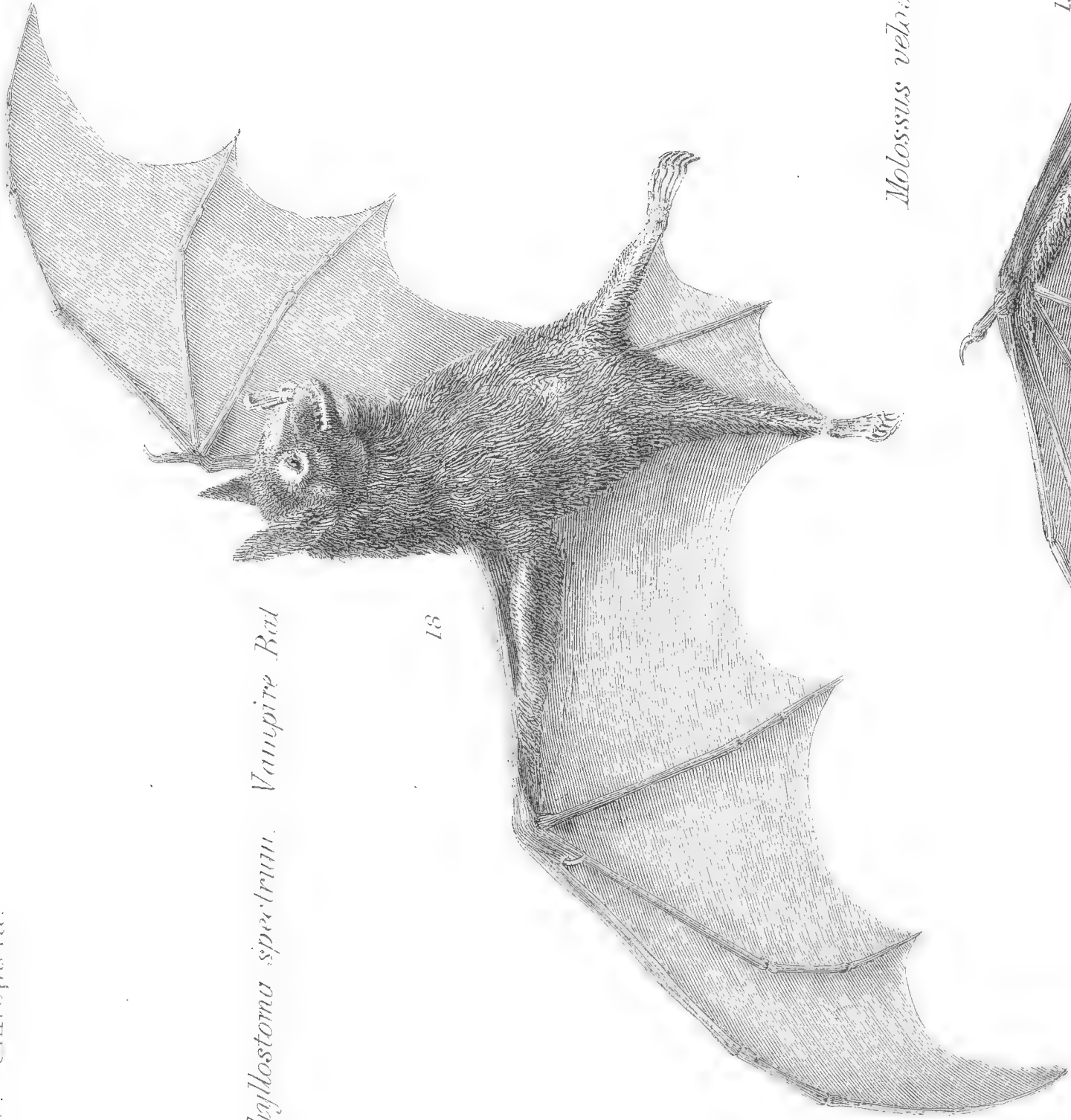


Genus. Pteropus, Phyllostoma Molossus.

Families { Pteropodidæ.  
Phyllostomidæ.  
Vespertilionidæ.

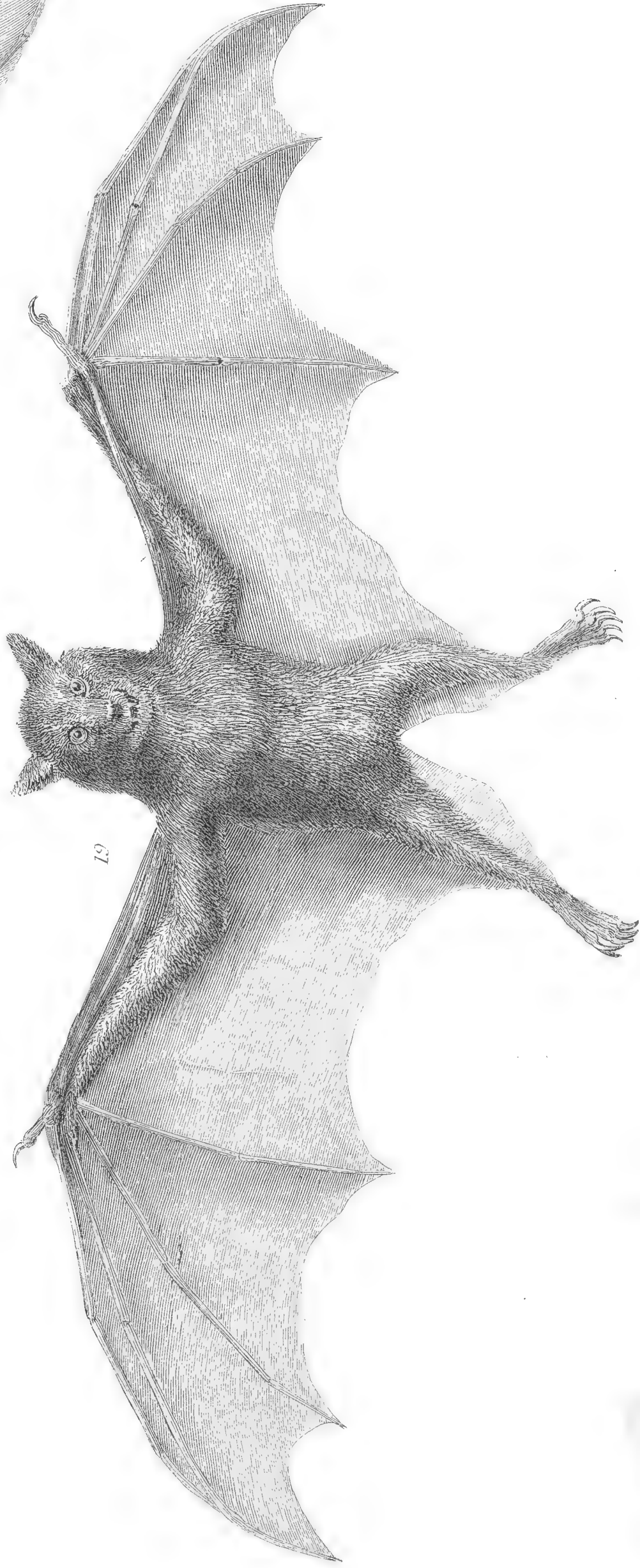
Order. Chiroptera.

*Phyllostoma spectrum. Vampire Bat.*



18

*Molossus velox. Bulldog Bat.*



19



17

*Pteropus echinus. Kalong Bat.*



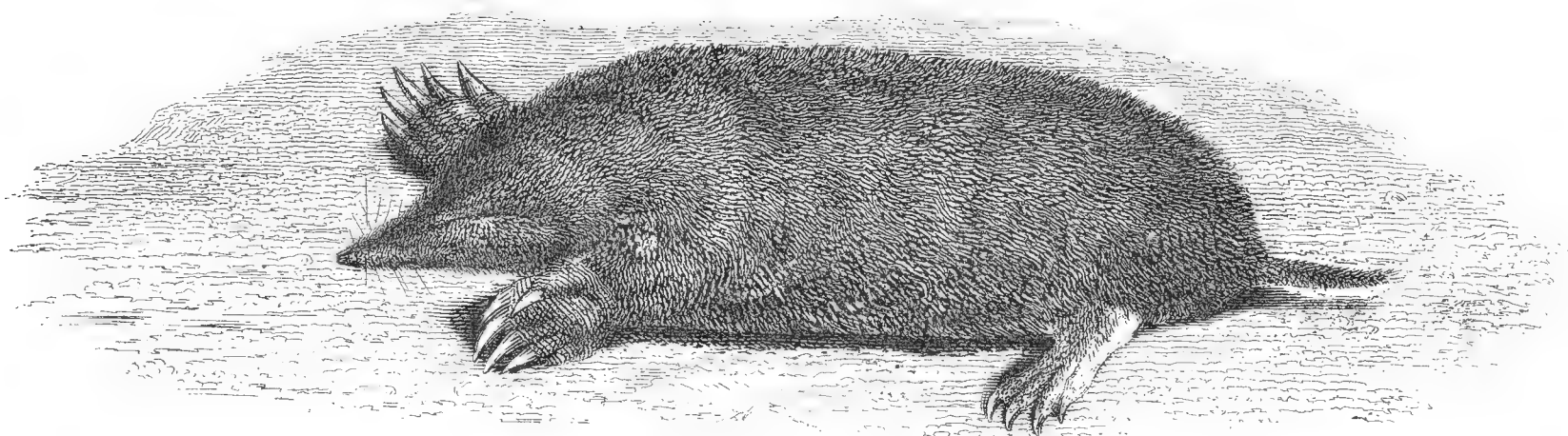


Order. Insectivora.

Genera. Erinaceus, Sorex, Talpa.

Families { Erinaceidæ.  
Soricidæ.  
Talpidæ.

22



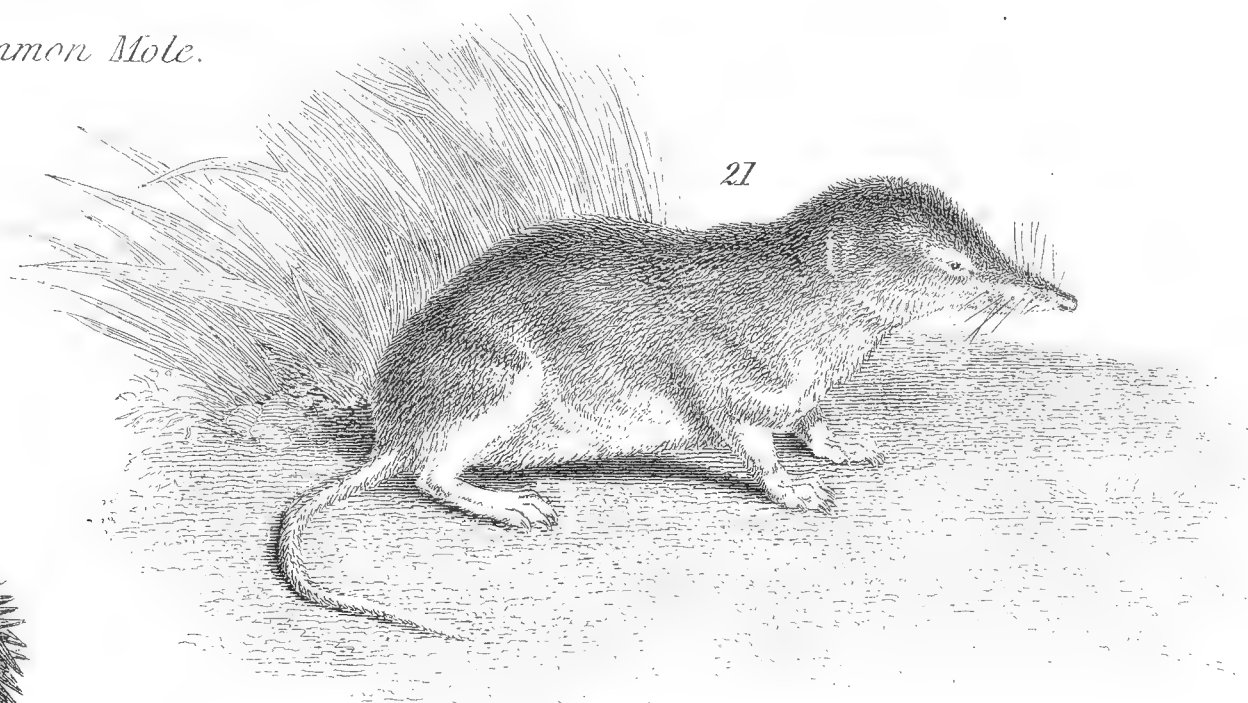
*T. Europæa. Common Mole.*

20



*E. Europæus. Common Hedgehog.*

21



*S. Araneus. Common Shrew.*

Order. Carnivora

Genera. Canis.

Family. Canidæ.

23



*C. Familiaris. (Var Thibet.) Thibet Dog*

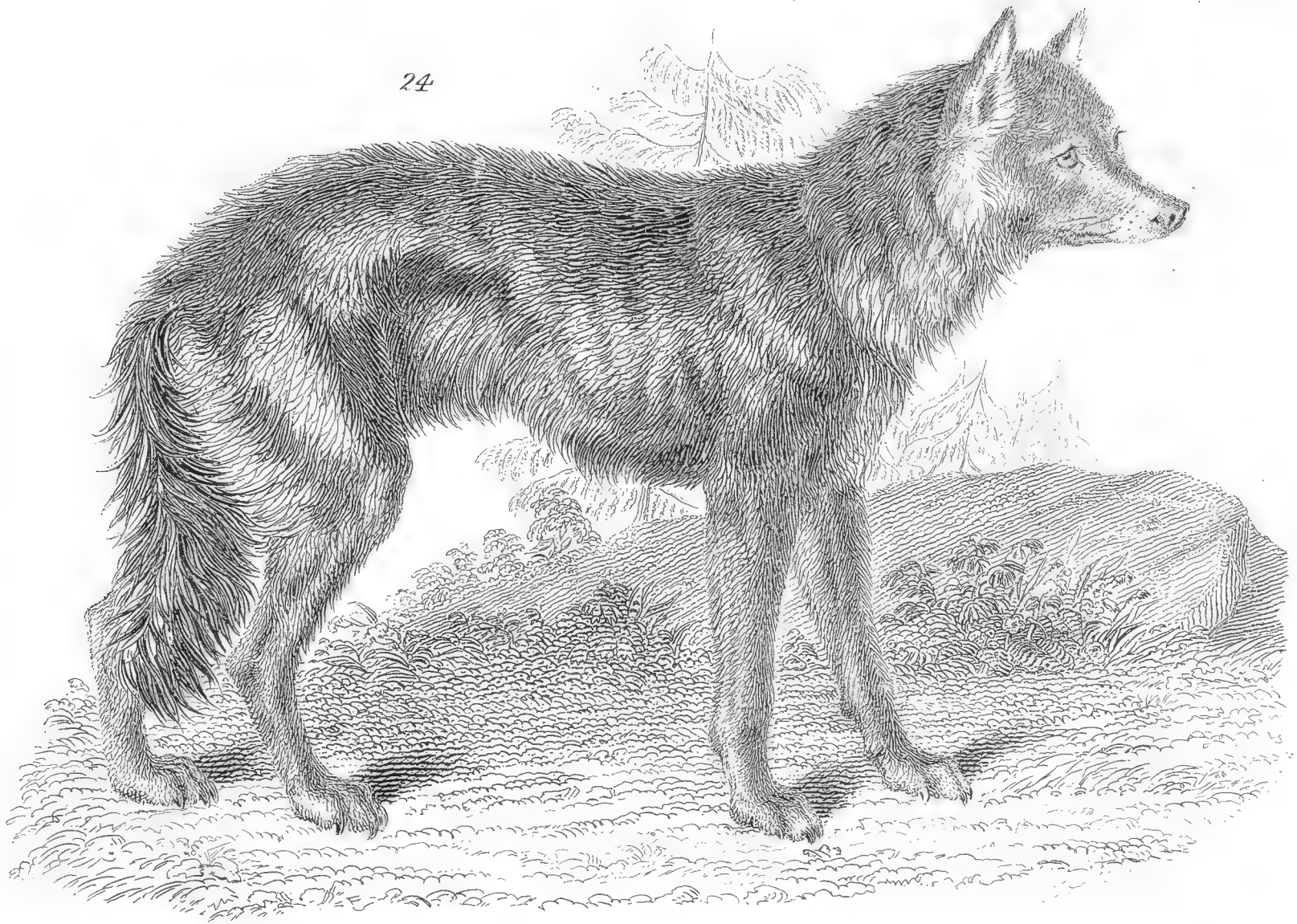




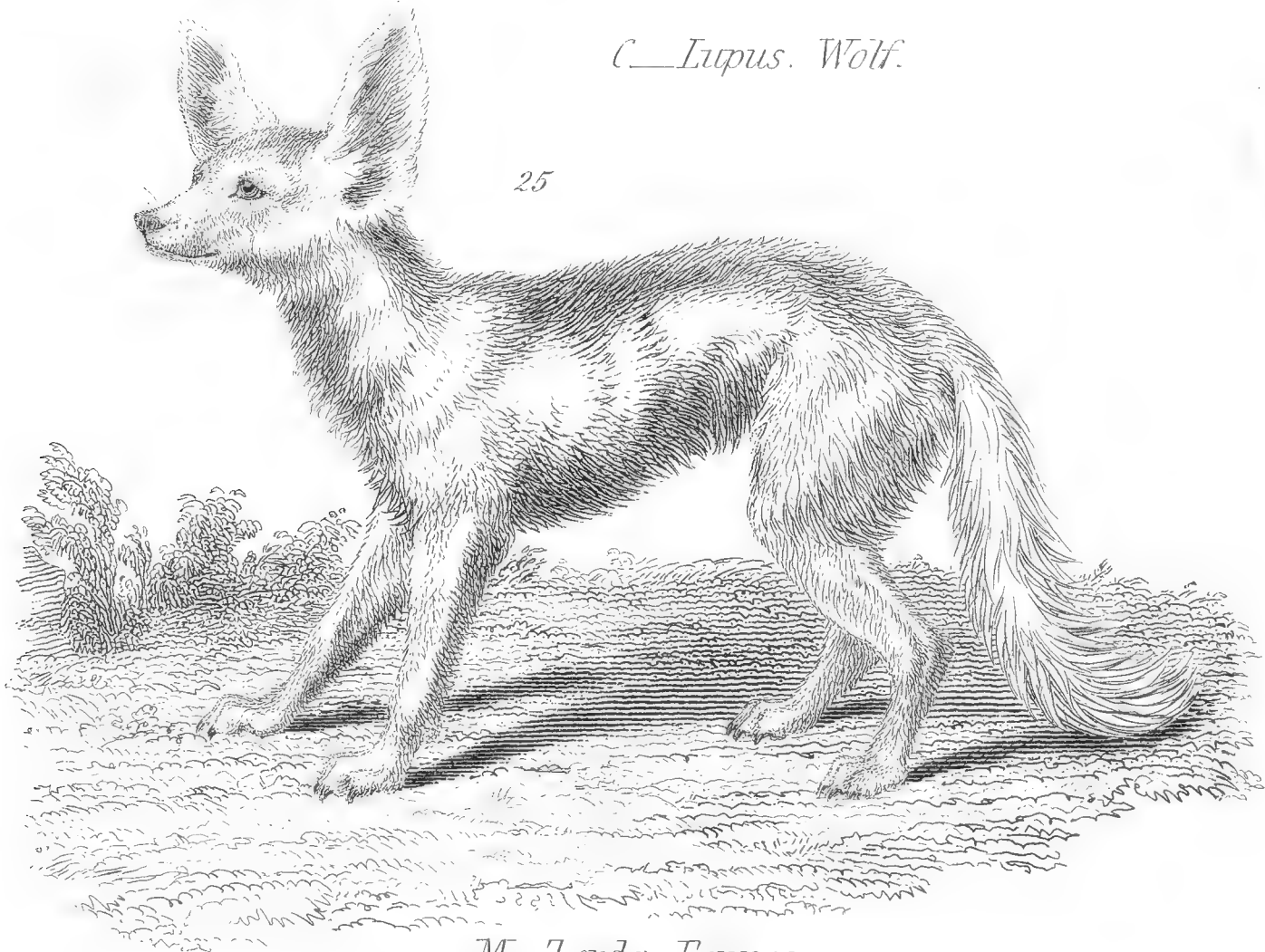
Genera: Canis. Megalotis. Vulpes.

Order: Carnivora.

Family: Canidæ.



*C. Lupus. Wolf.*



*M. Lerda Fennec.*



*V. Vulgaris. Fox.*





Order. Carnivora.

Genera. Canis Felis.

Families { Canidæ.  
Felidæ.



27

*C. aureus* Jackal.



28

*F. leo* Lion.



29

*F. tigris* Tiger.

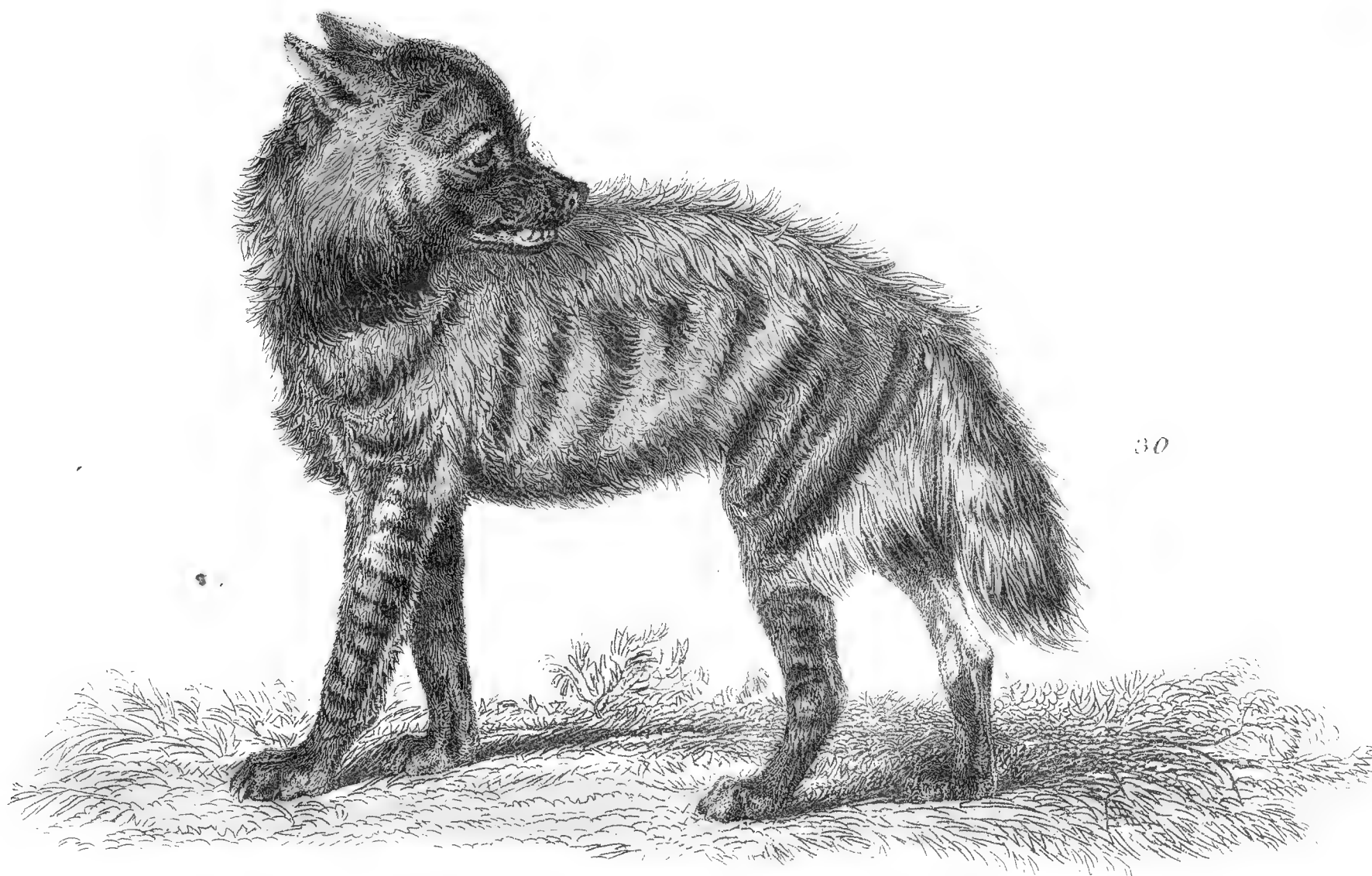




Order: Carnivora.

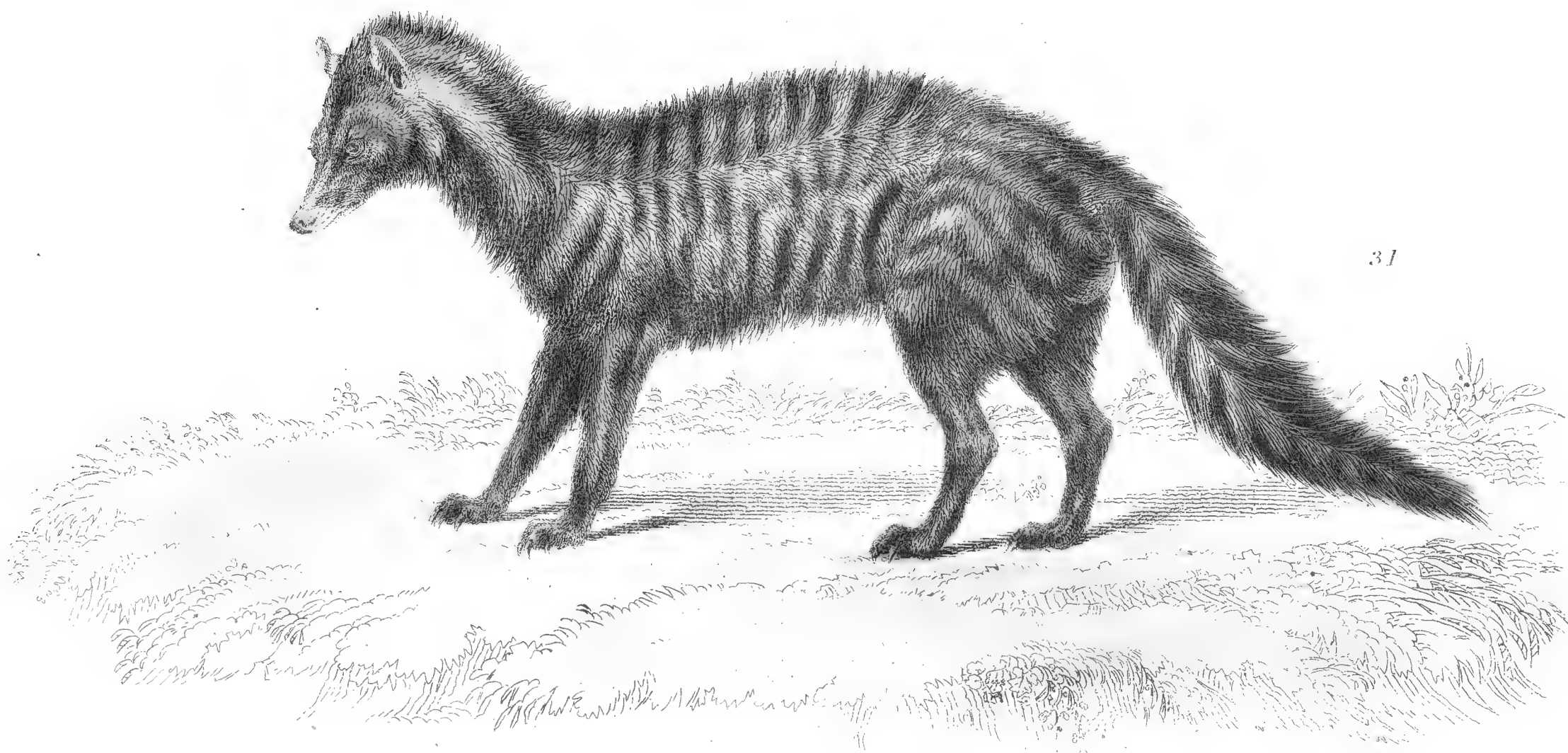
Genera: Hyæna. Viverra. Herpestes.

Families { Hyænidæ.  
Viverridæ.



30

*H. Striata. Striped Hyæna.*



31

*H. Civetta. Civet.*



32

*H. Ichneumon. Egyptian Ichneumon.*





Order: Carnivora.

Genera: Mephitis. Martus. Lutra.

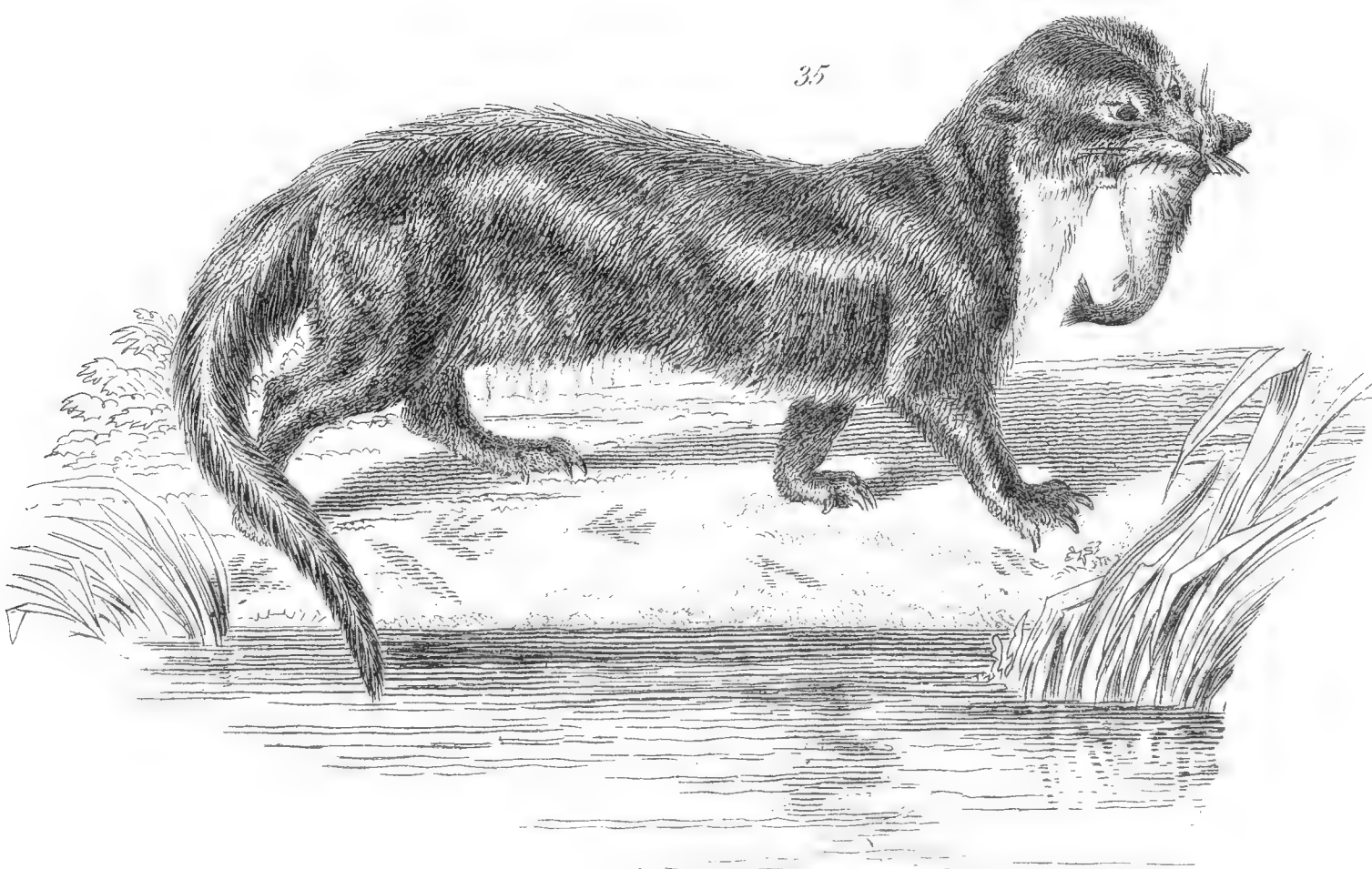
Families Mustelidæ.



*Meph<sup>s</sup>. varians. Skunk.*



*Mart<sup>s</sup>. Foina. Pine Martin.*



*L. Vulgaris. Common Otter.*





Order. Carnivora.

Genera. Gulo. Procyon. Nasua.

Families {  
Mehidæ.  
Ursidæ.



36

*G. luscus* Wolverine.



37

*P. lotor* Raccoon.



38

*N. fuscus* Brown Coatimundi.





Order. Carnivora.

Genera. Ursus.

Family. Ursidæ.

39



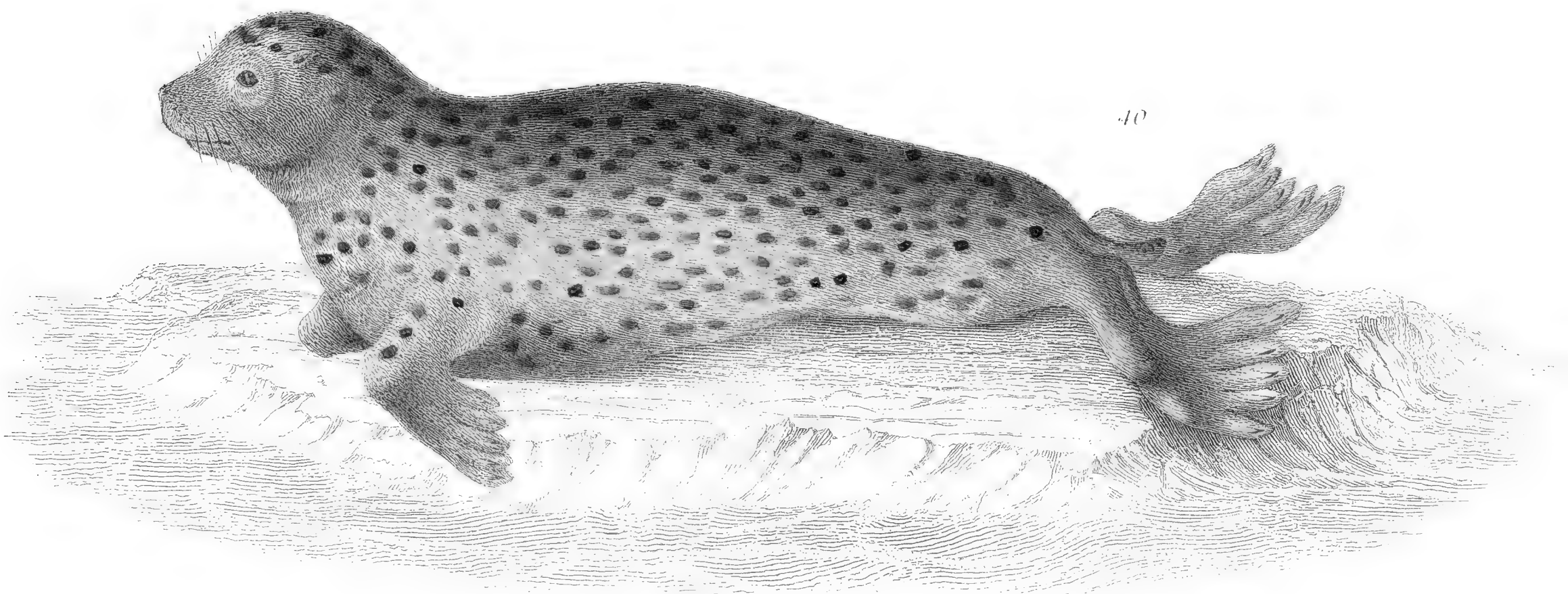
*U. maritimus. Polar Bear*

Order. Pinnipedia.

Genera. Phoca.

Family. Phocidæ.

40



*P. vitulina. Common Seal.*



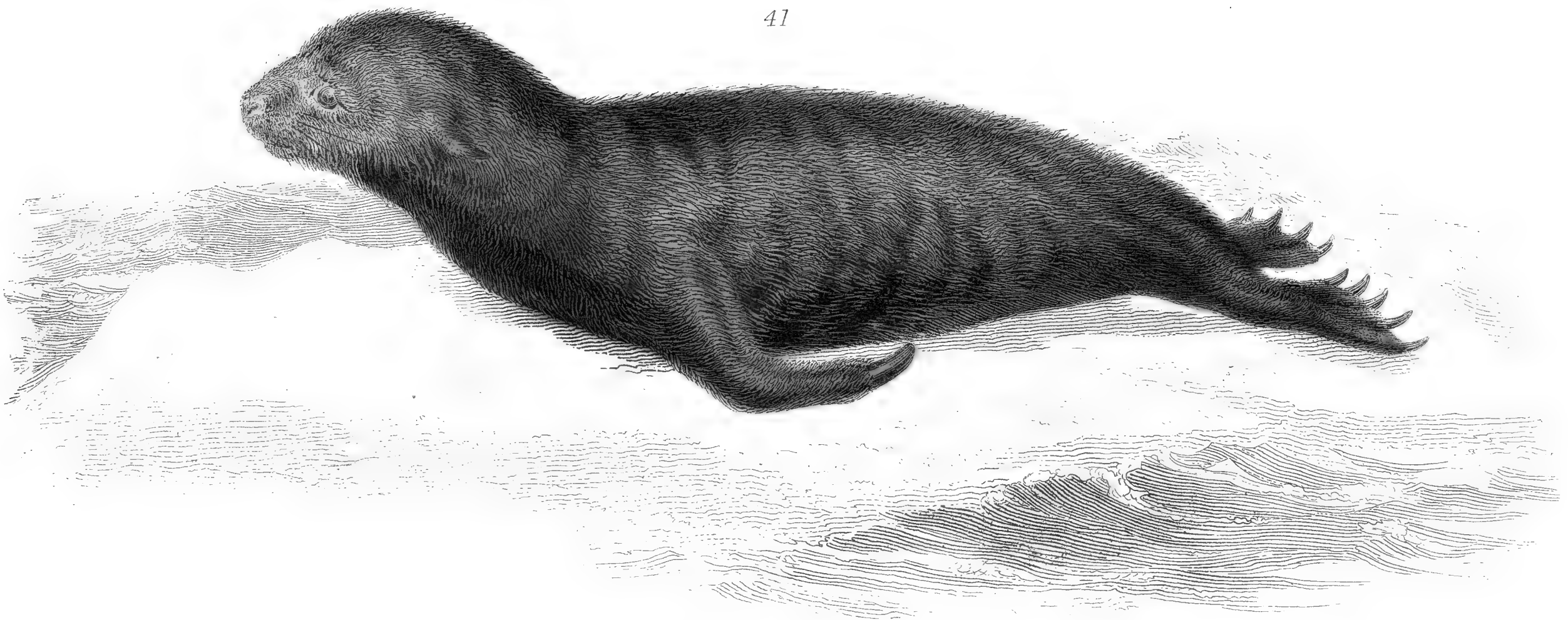


Order. Pinnipedia.

Genera. Trichecus. Arctocephalus.

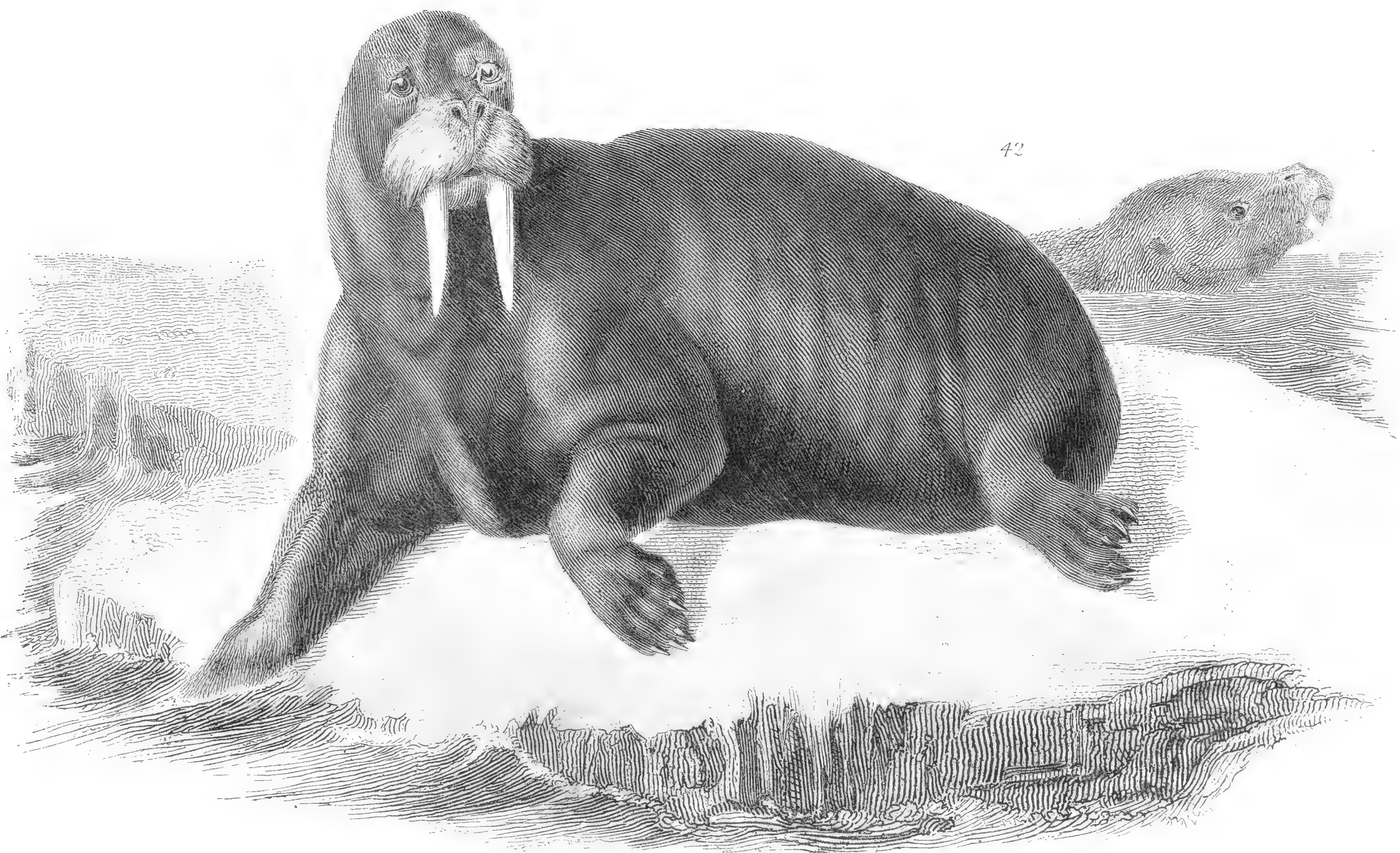
Families { Phocidæ.  
Trichecidæ.

41



*A. Ursinus.*—Sea Bear.

42



*T. Rosinarus.*—Arctic Walrus or Morse.





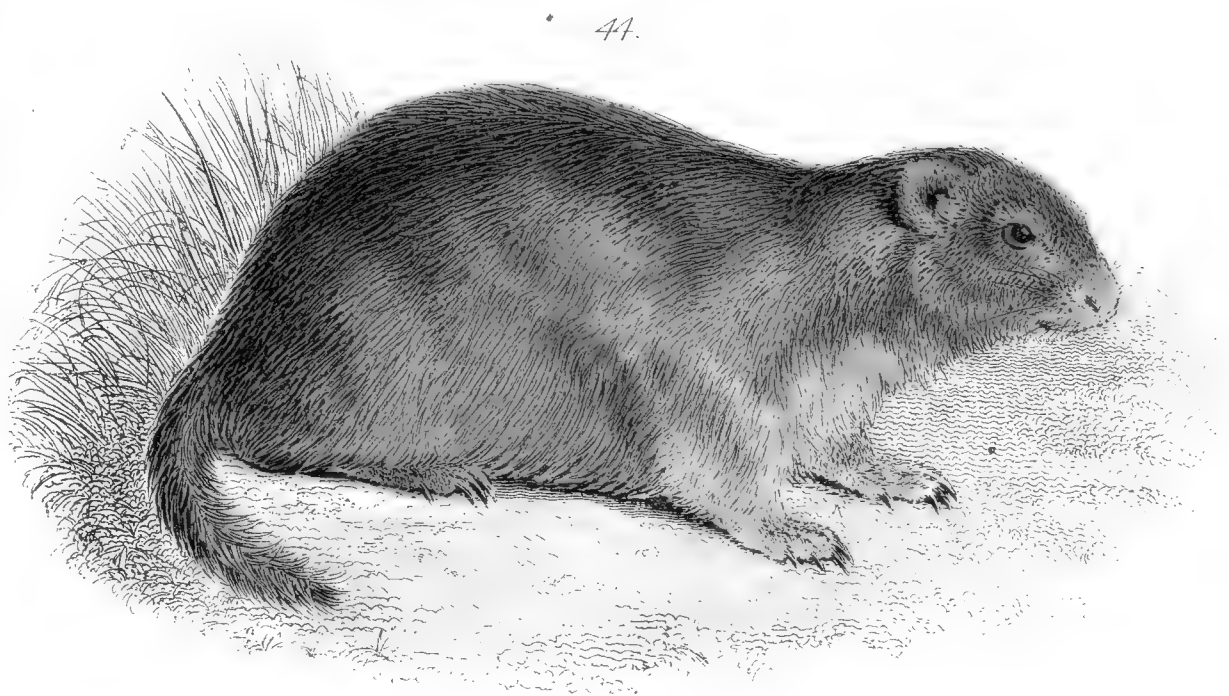
Order . Rodentia .

Genera . Sciuropterus, Arctomys, Dipus . Helamys.

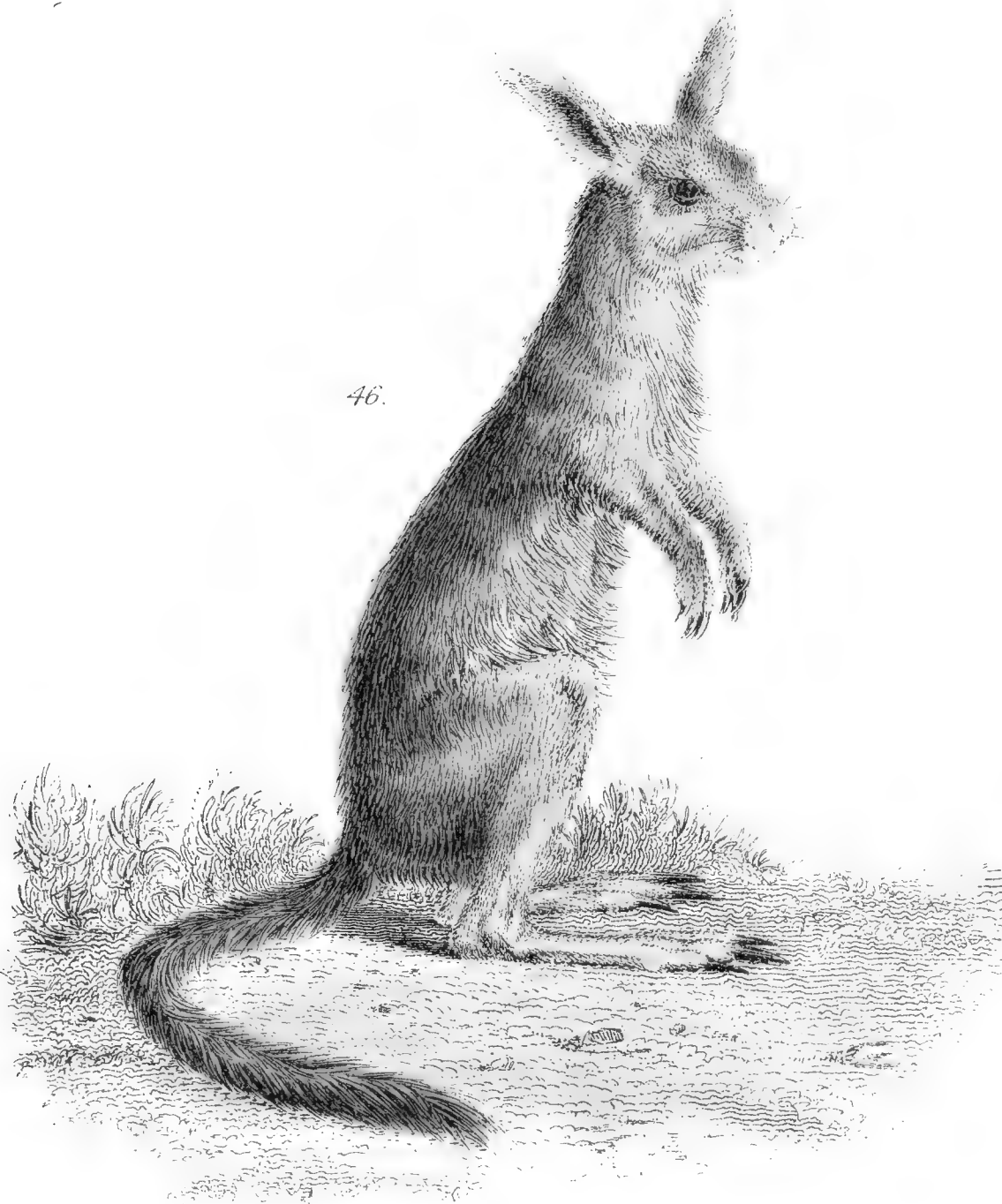
Families { Sciuridæ.  
{ Dipodidæ



*S. Sabrinus.* — Greater Flying Squirrel .



*A. Marmotta* — alpine Marmot .



*Hel. Capensis.* — Cape Jerboa .



*D. Aegyptius.* — Egyptian Jerboa .



# MAMMALIA

PLATE 15

Order, Rodentia.

Genera, Myoxus Mus, Myodius, Castor

Families { Muridæ  
Myoxidæ  
Castoridæ



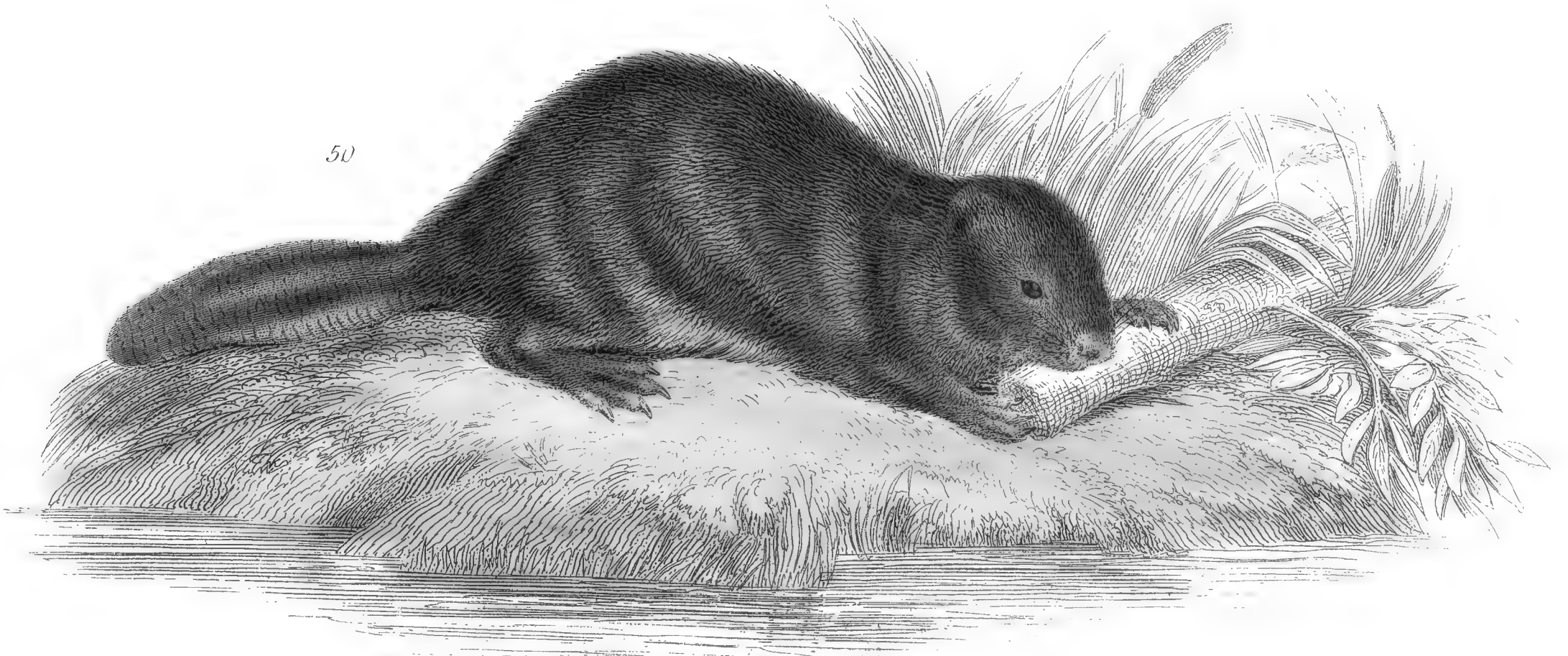
*My. Avellanarius.*—Dormouse.



*Mus. Rattus.*—Black Rat.



*Myod. Lemmus.*—Lemming



*C. Fiber.*—Common Beaver.

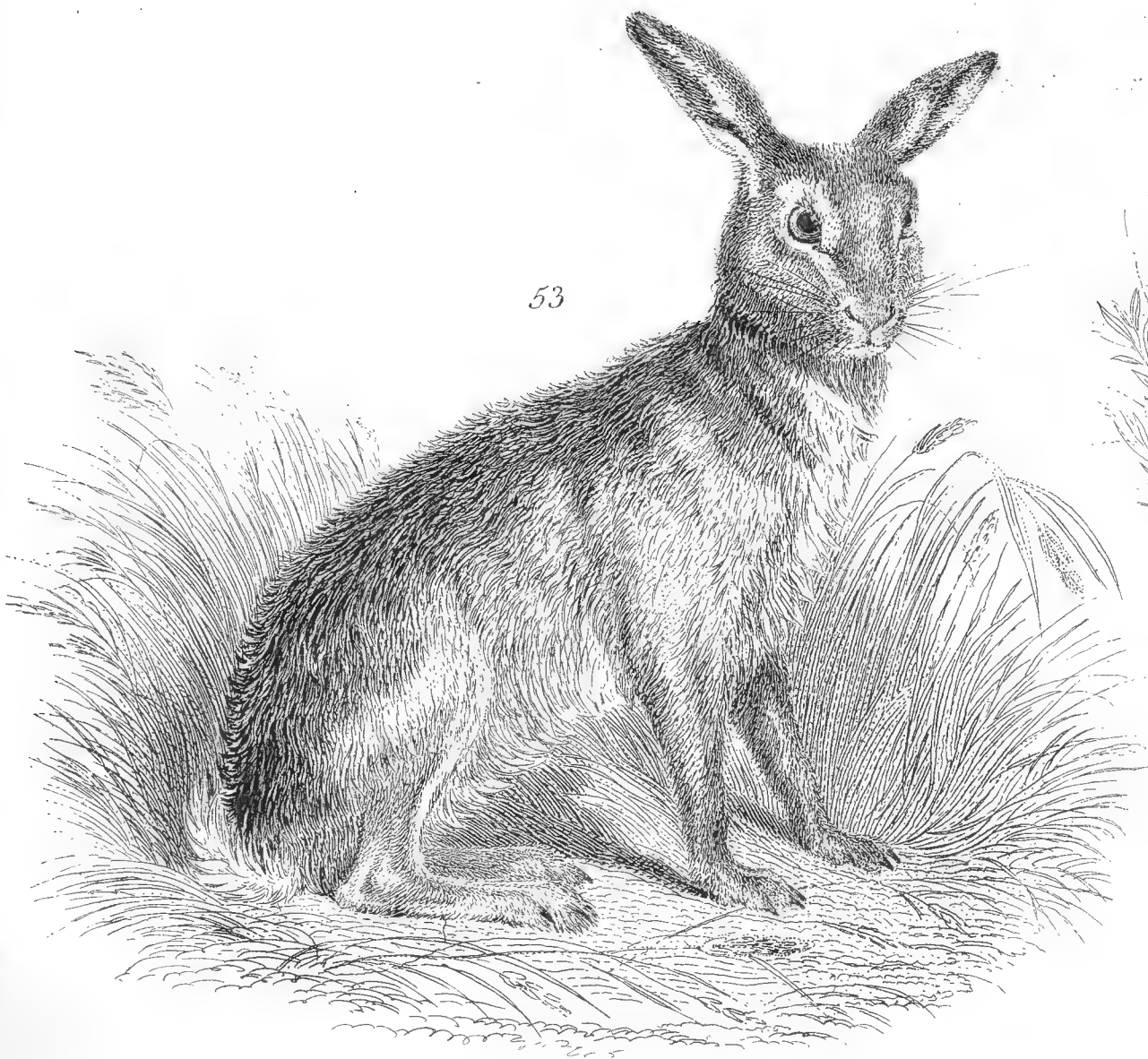




Order Rodentia

Genera Myopotamus. Hystrix Lepus Lagomys,

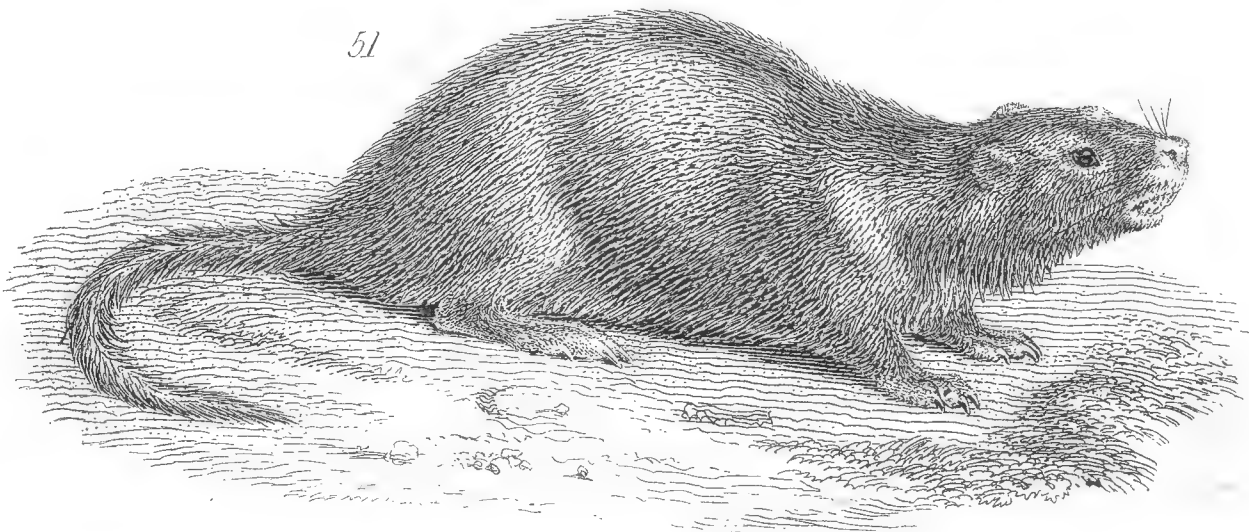
Families { Scuridæ.  
Leporidæ.  
Hystriidæ.



*Lep. Timidus*, — Common Hare.



*Lag. Pusillus*, — Calling Hare.



*Myopot<sup>s</sup> Coypu* — Coypu



*H. Cristata*, — Common Porcupine.





MAMMALIA.

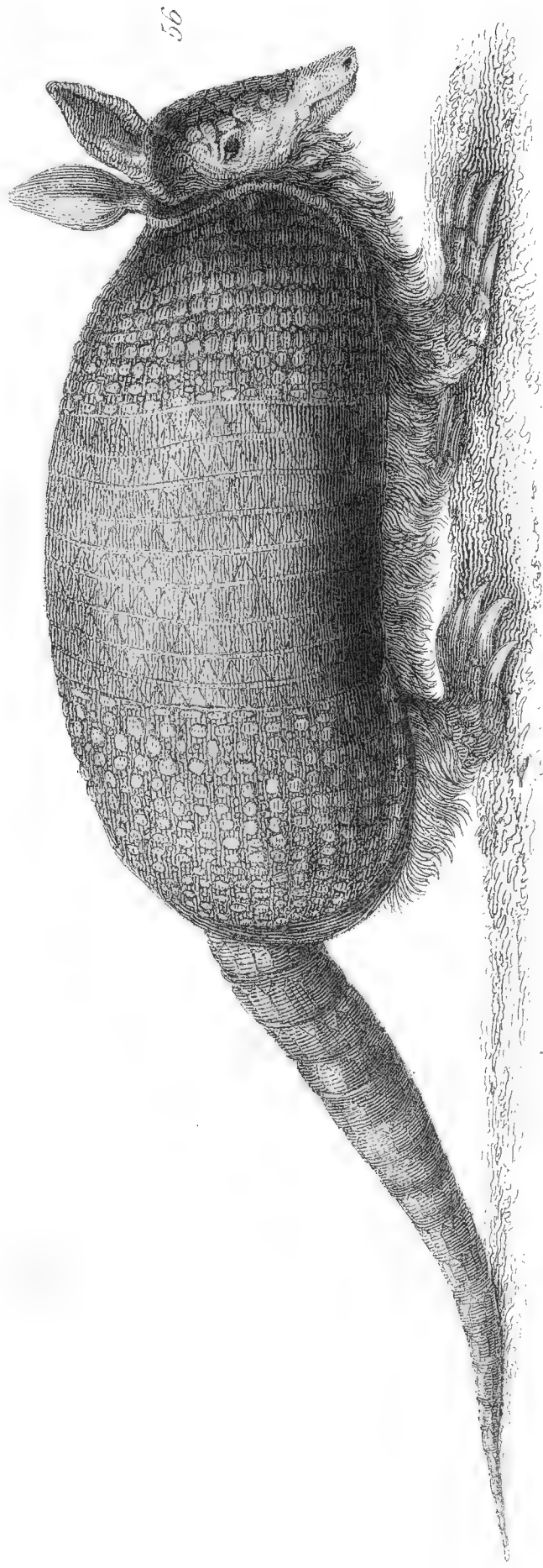
Families {  
 Bradypodidæ.  
 Dasypodidæ.  
 Myrmecophagidæ.

Genera. Bradypus, Dasypus, Myrmecophaga, Manis.

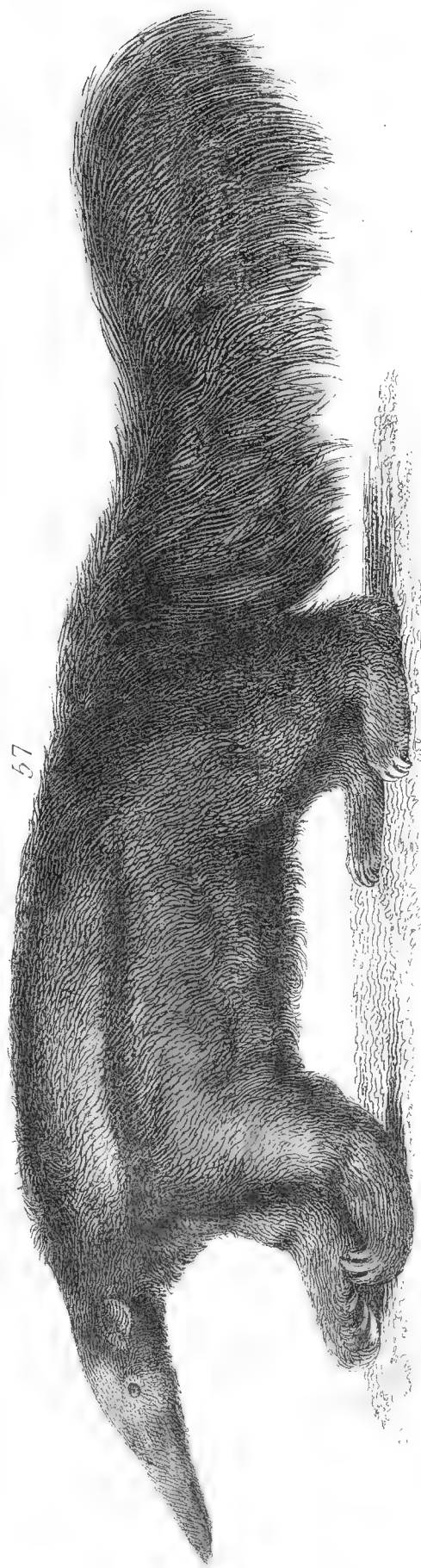
Order. Edentata.



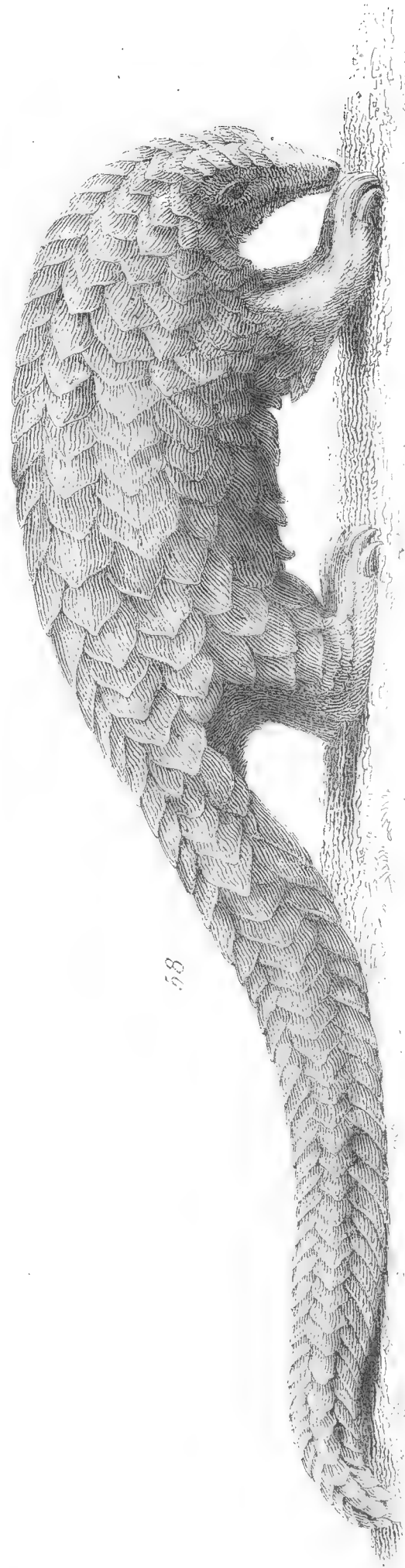
*B. Tridactylus. Three-toed Sloth.*



*D. Peba. Peba.*



*Myr. Jubata. Great Ant-eater.*



*M. Tetradactyla. Long-tailed Manis.*

(Chas. Byrne Delin.)

(J. Lowry Sculp.)





Order Ruminantia.

Genera Bonasus, Ovis.

Family Bovidæ.

59



*B. Americanus.*—*American Bison.*

60



*O. Ammon.*—*Thibet Sheep.*

61



*O. Montana.*—*Rocky Mountain Sheep.*

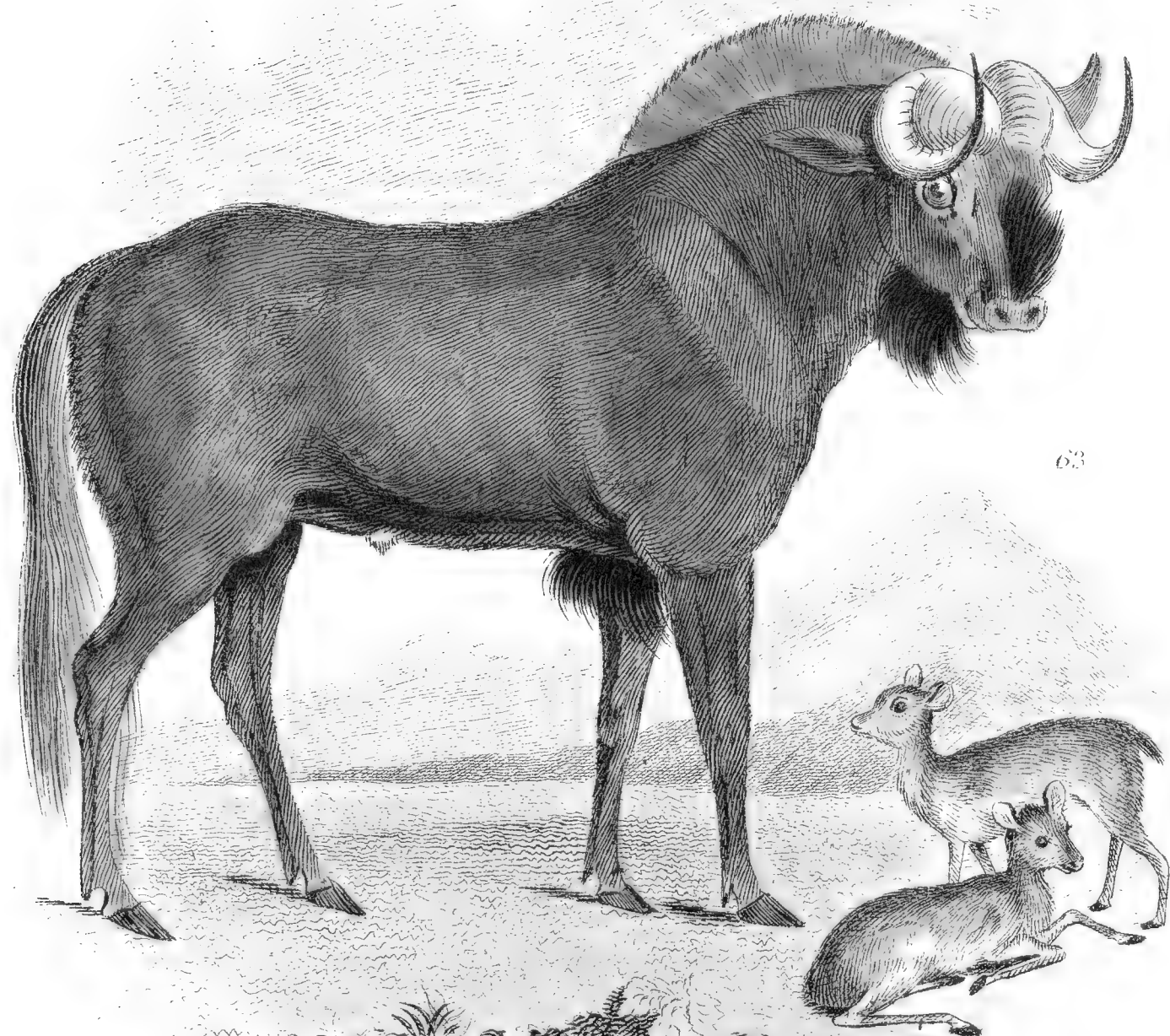




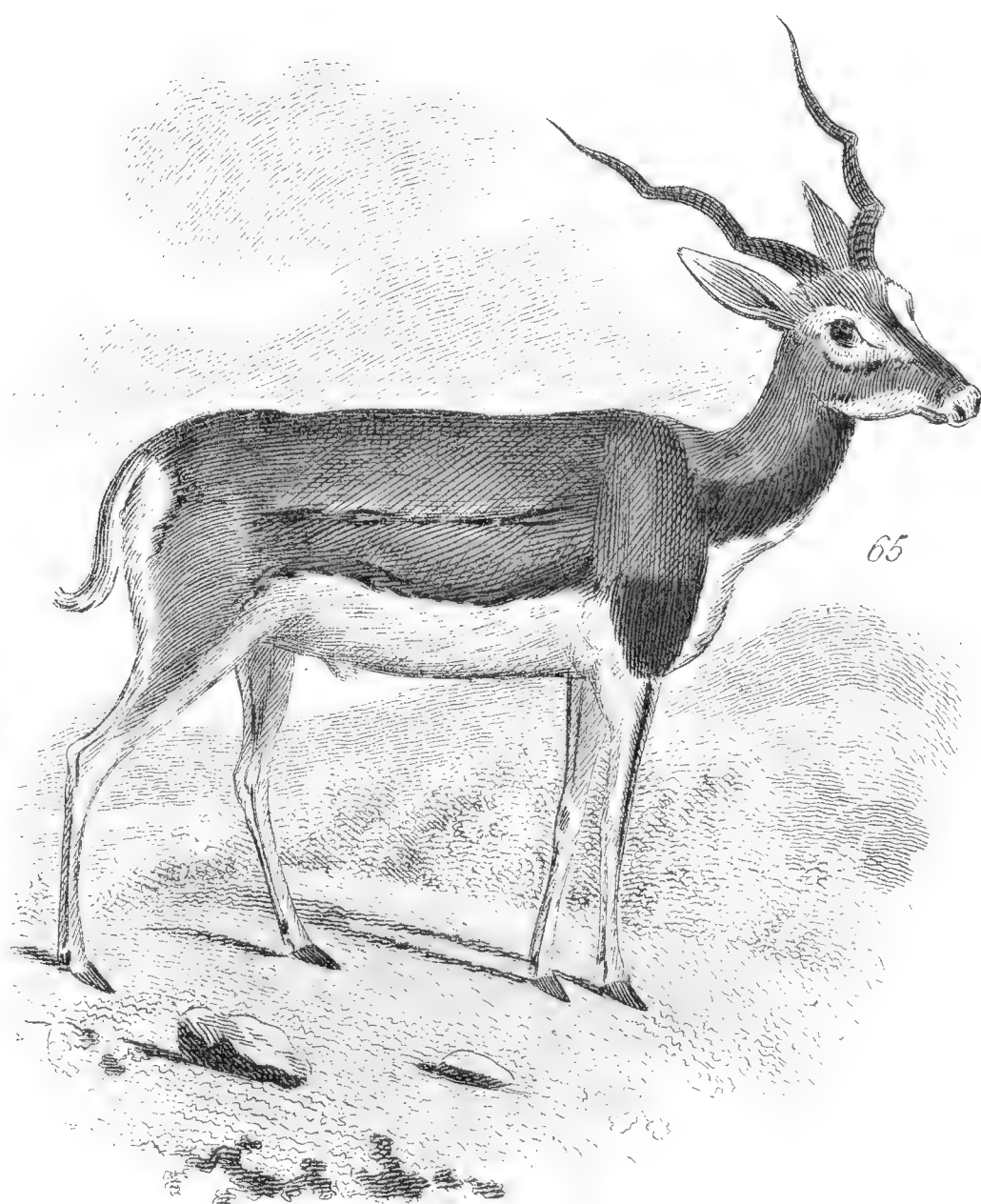
Order. Ruminantia.

Family. Bovidæ.

Genera. Capra, Capreolus, Cephalophus, Antelope.



*Capra pygmaeus* —  
Pygmy Antelope.



*A. cervicapra* — Common Antelope.

*Capra gnu* — Gnu.



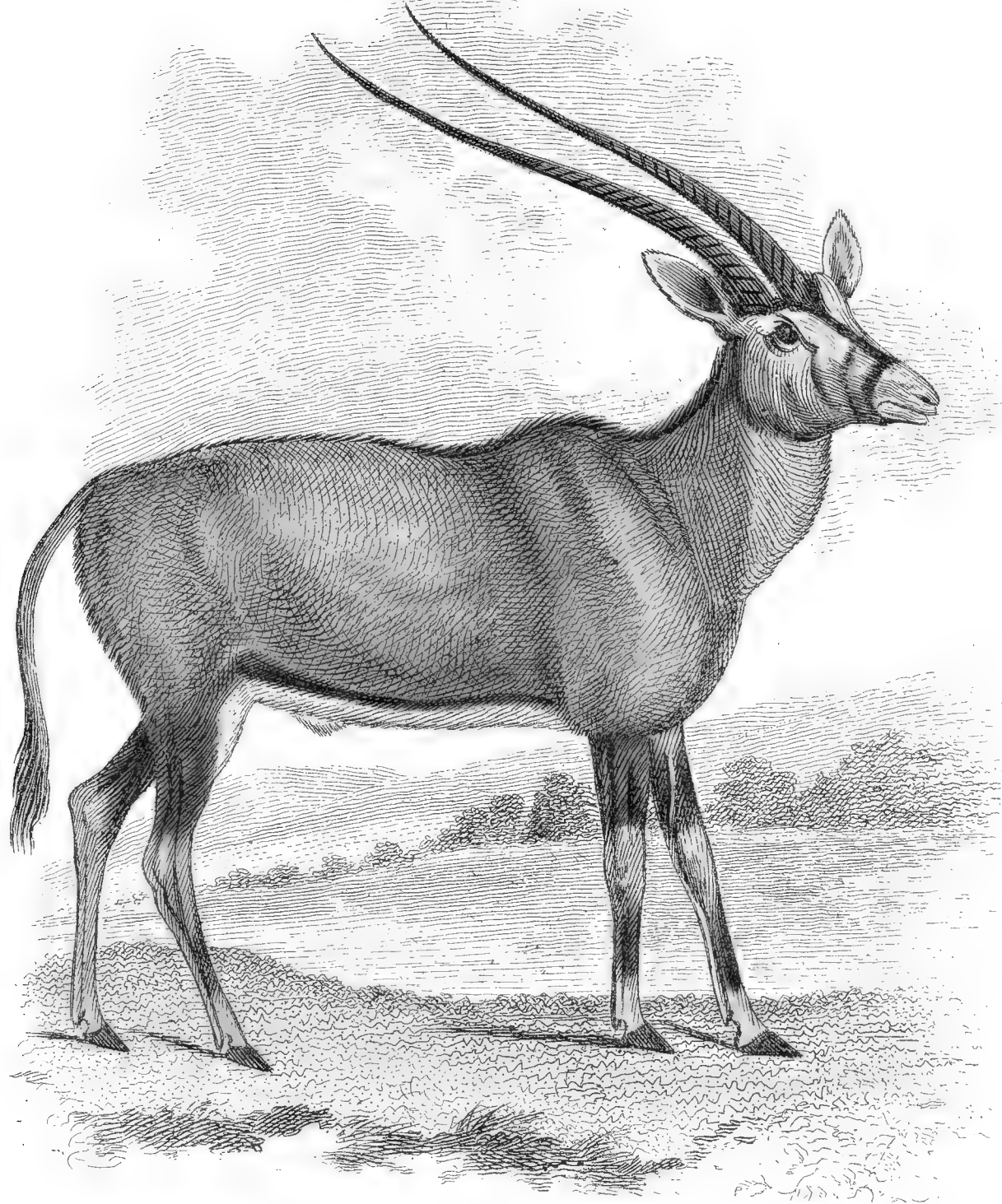


Genera, Oryx, Portax.

Order, Ruminantia.

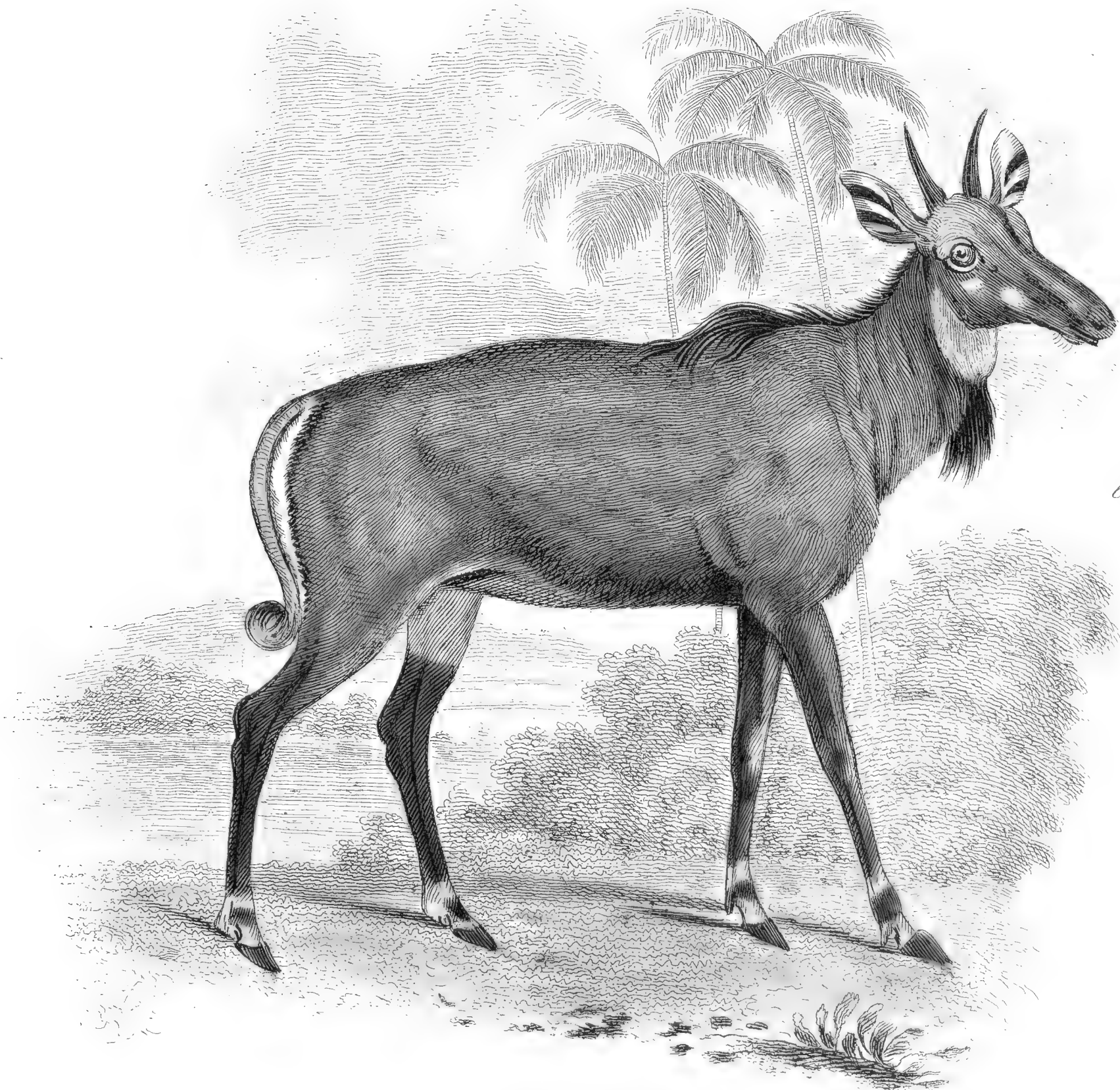
Family, Bovidae.

66



*O. leucoryx* — *Leucoryx*.

67



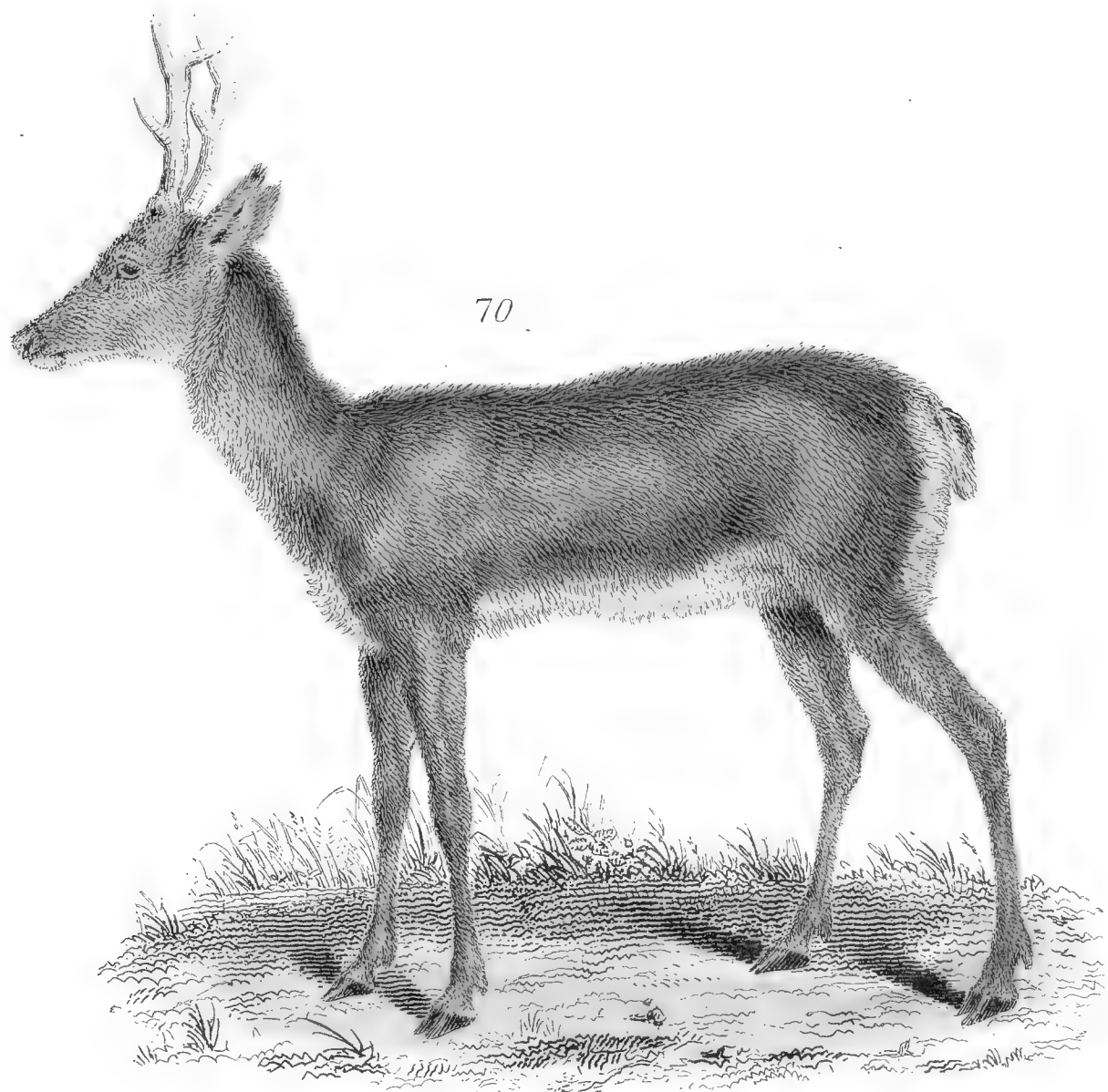
*Portax picta* — *Nyl-Ghau*



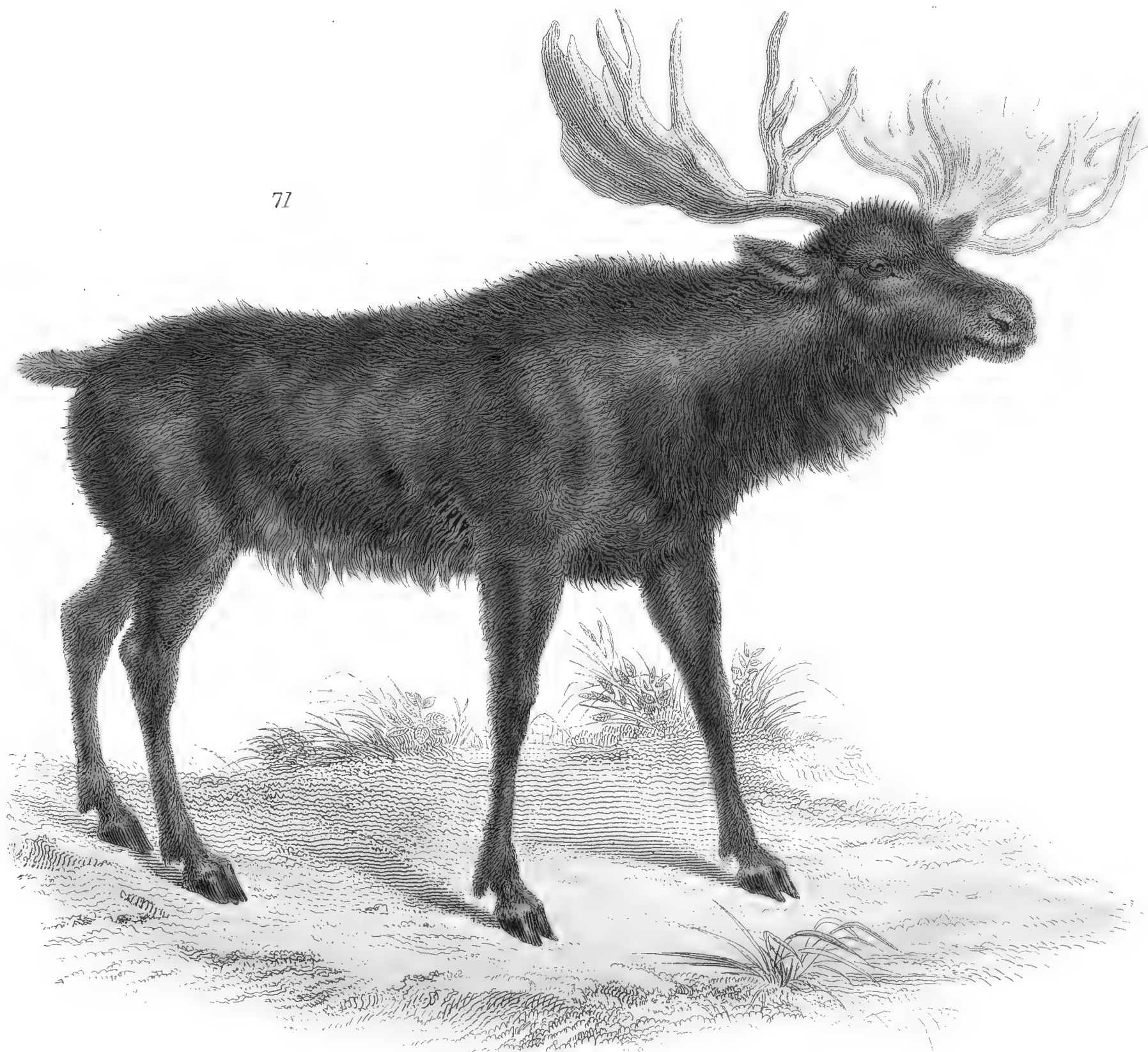
Order. Ruminantia.

Genera Capræolus. Alces.

Family Cervidæ.



Cap.<sup>s</sup> Capræa — Roe buck .



Alces palmatus. — Elk or Moose Deer .





Order. Ruminantia

Genera. Rangifer Camelopardalis .

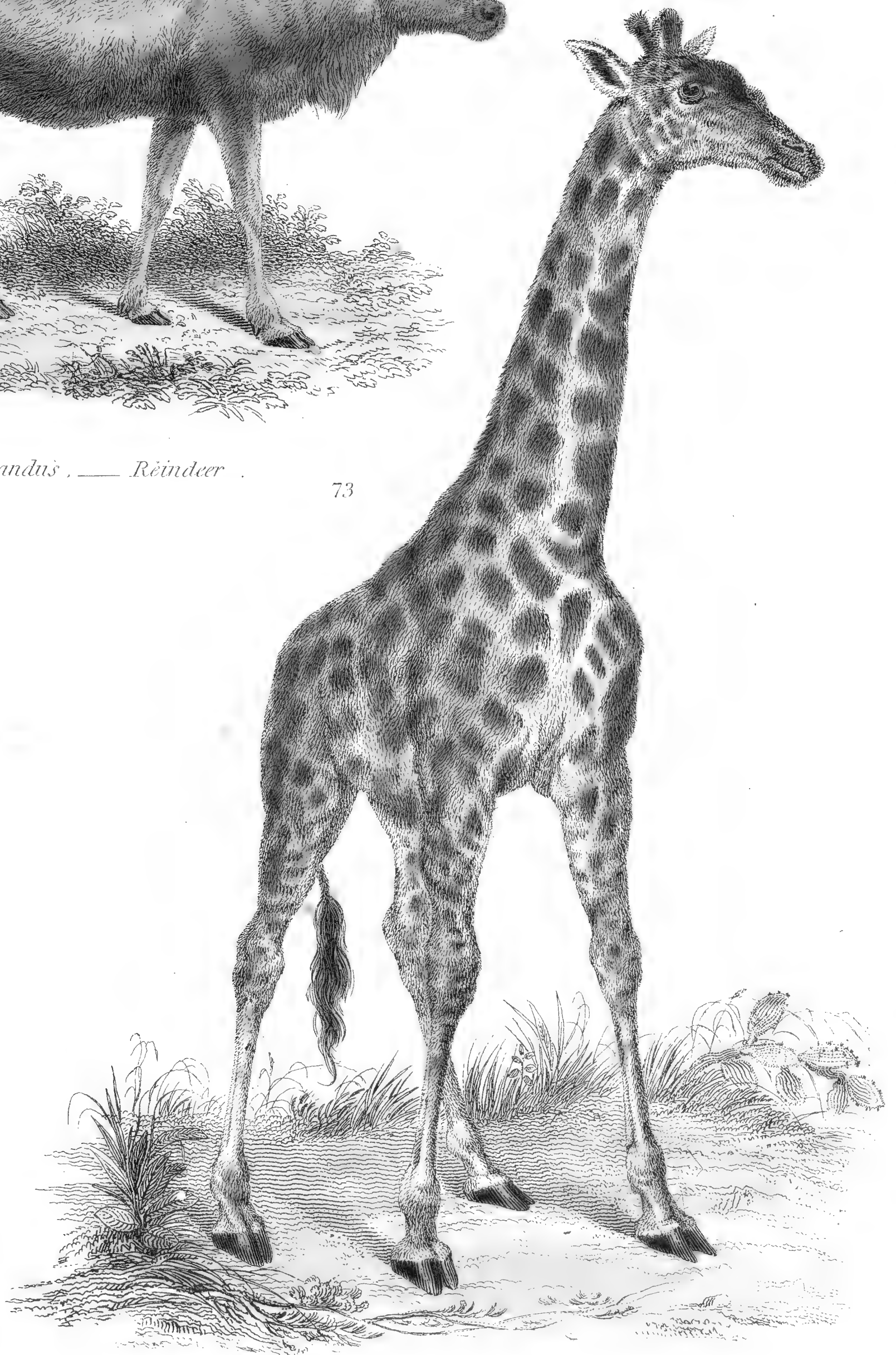
Families { Cervidæ.  
Camelopardidæ.

72



*R. Tarandus* , — Reindeer .

73



*Cam. Giraffa* . — Camelopard .

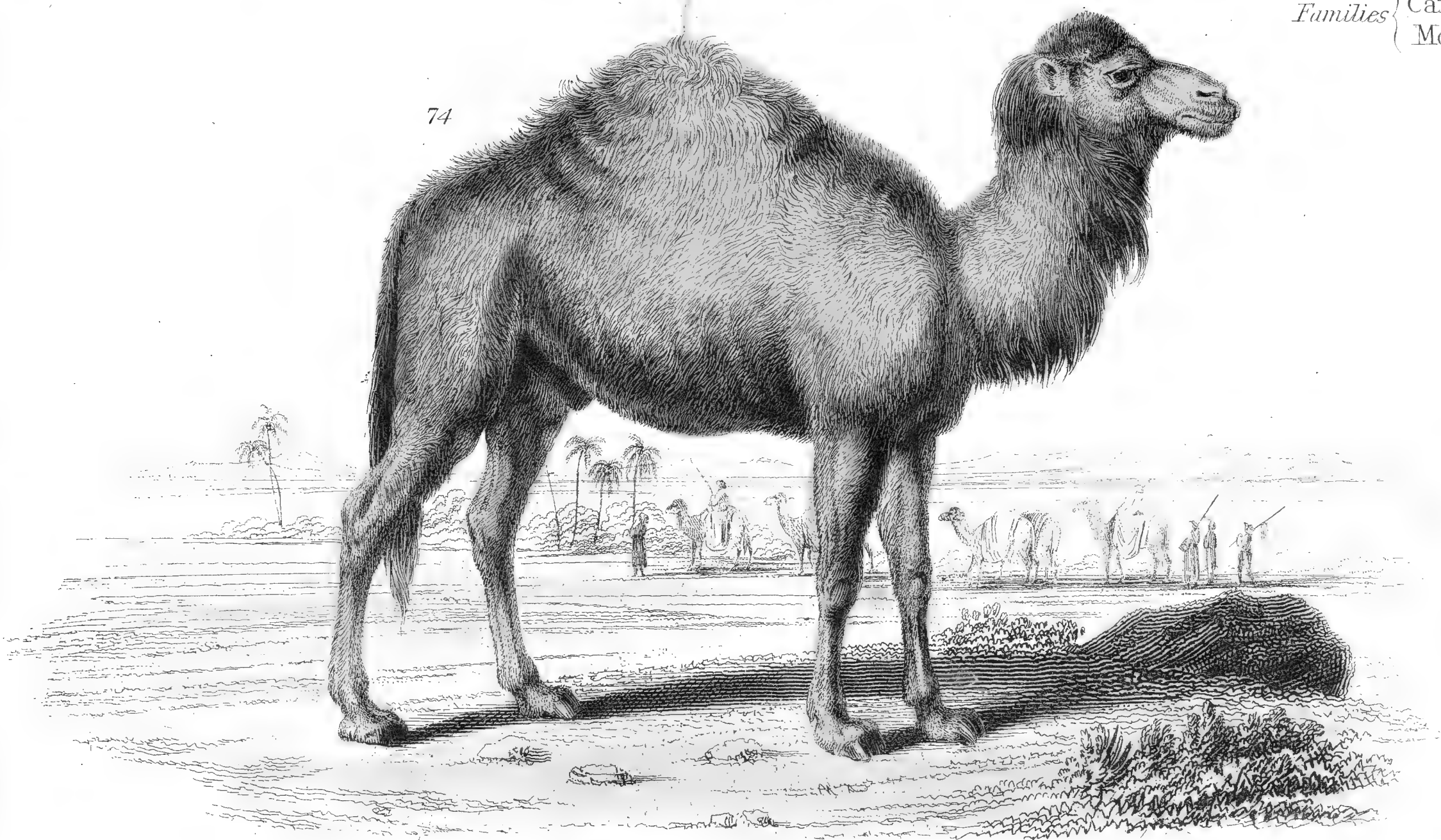


Order Ruminantia.

Genera Camelus, Auchenia, Tragulus.

Families { Camelidæ.  
Moschidæ.

74



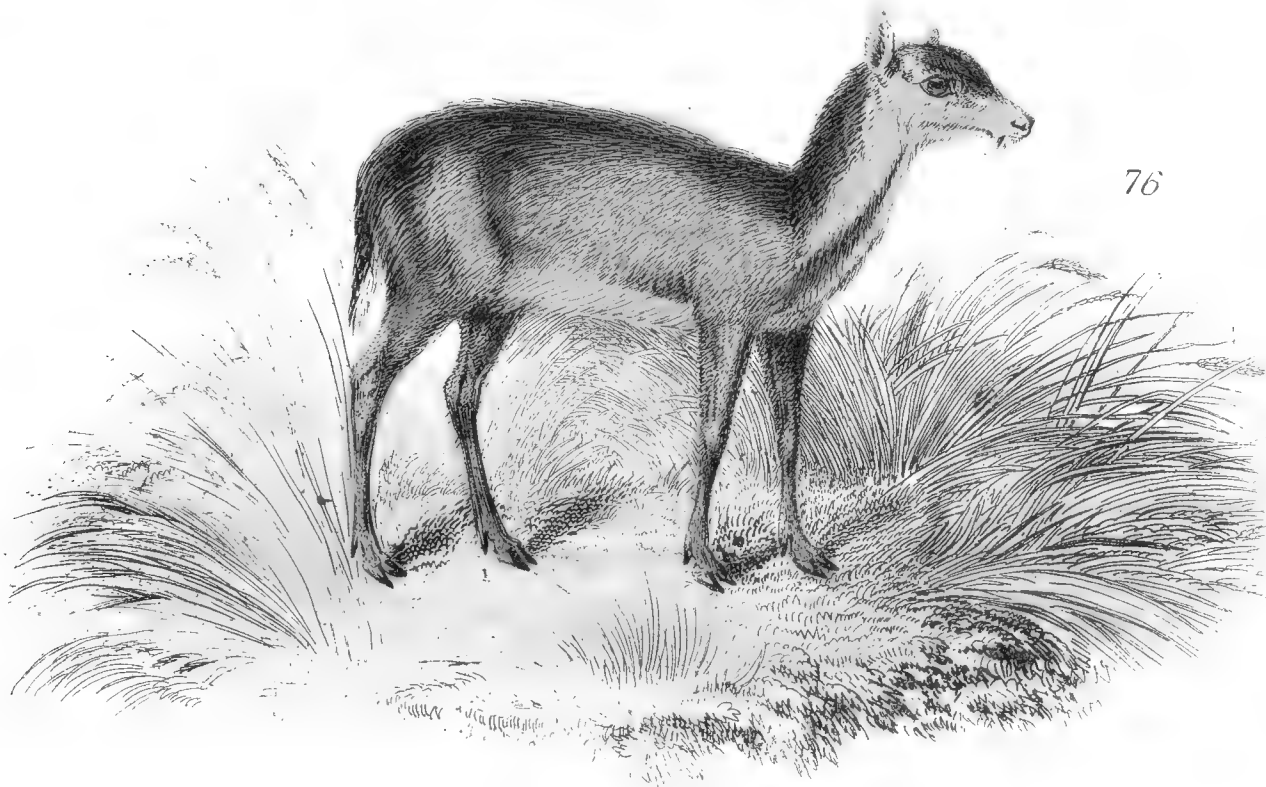
*C. Dromedarius.*—Dromedary.

75



*A. Glama.*—Llama.

76



*T Javanicus.*—Java Musk Deer.

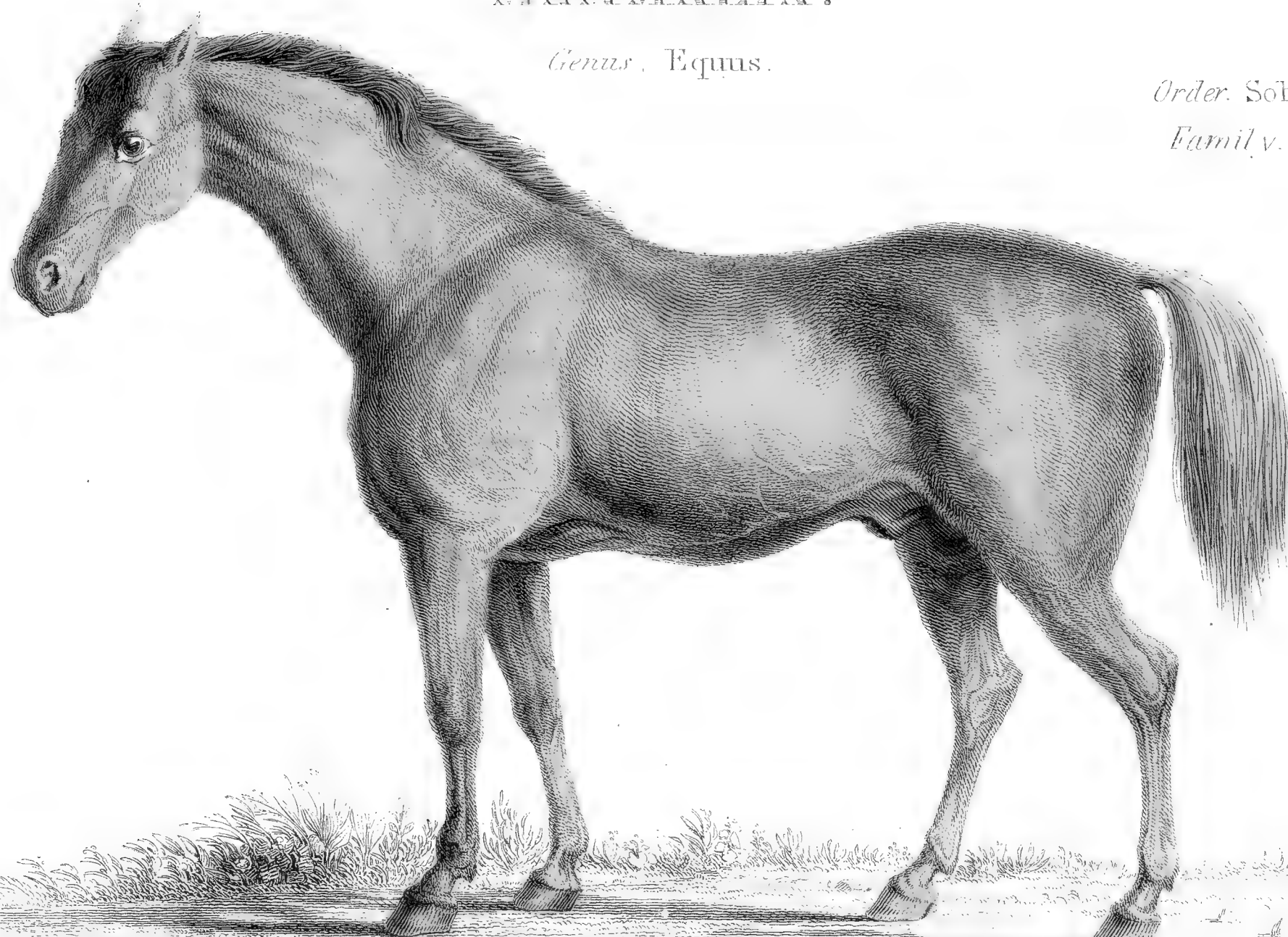




Genus, Equus.

Order, Solidungula.

Family, Equidae.



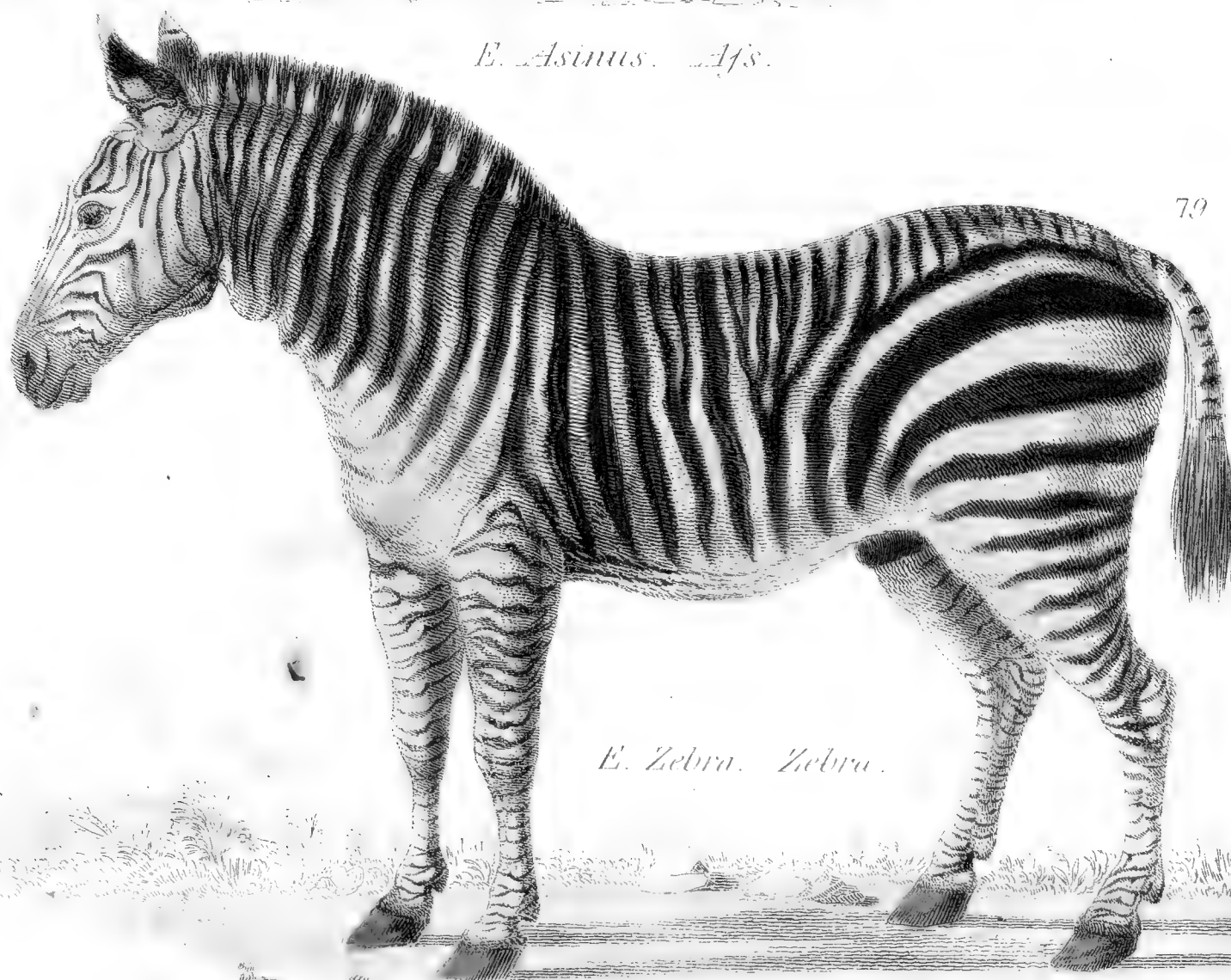
77

*E. Caballus.* Horse.



78

*E. Asinus.* Ass.



79

*E. Zebra.* Zebra.





MAMMALIA.

Order Pachydermata.

Genera. Rhinoceros, Hippopotamus, Tapirus.

Families { Rhinocerotidæ.  
Hippopotamidæ.  
Tapiridæ.

80



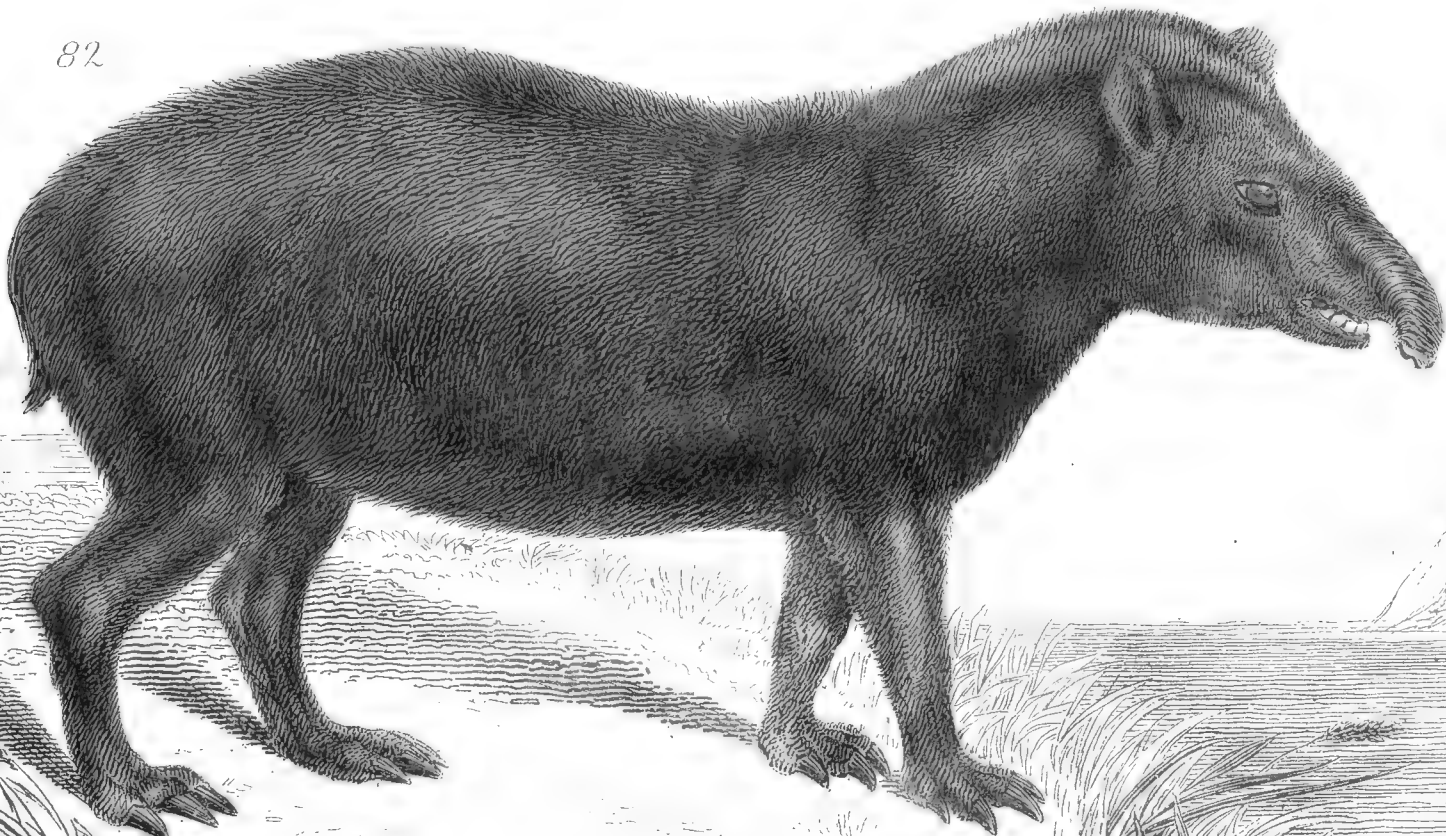
*Rhinoceros unicornis. Indian Rhinoceros.*

81



*Hippopotamus amphibius. Hippopotamus.*

82



*Tapirus americanus. American Tapir.*

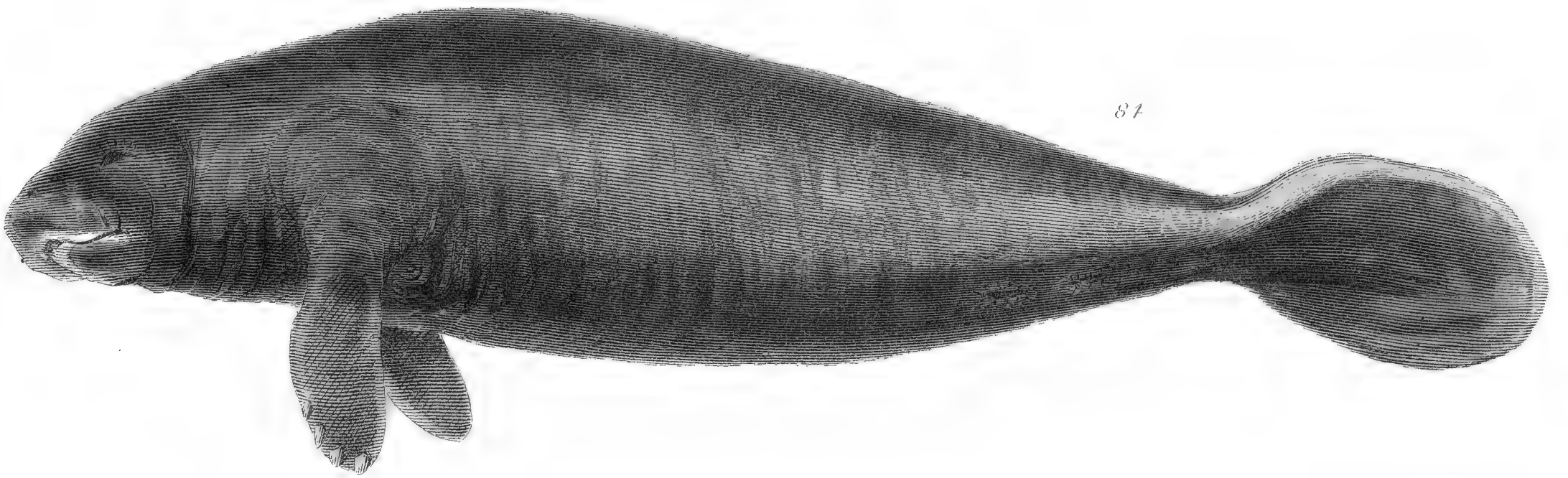




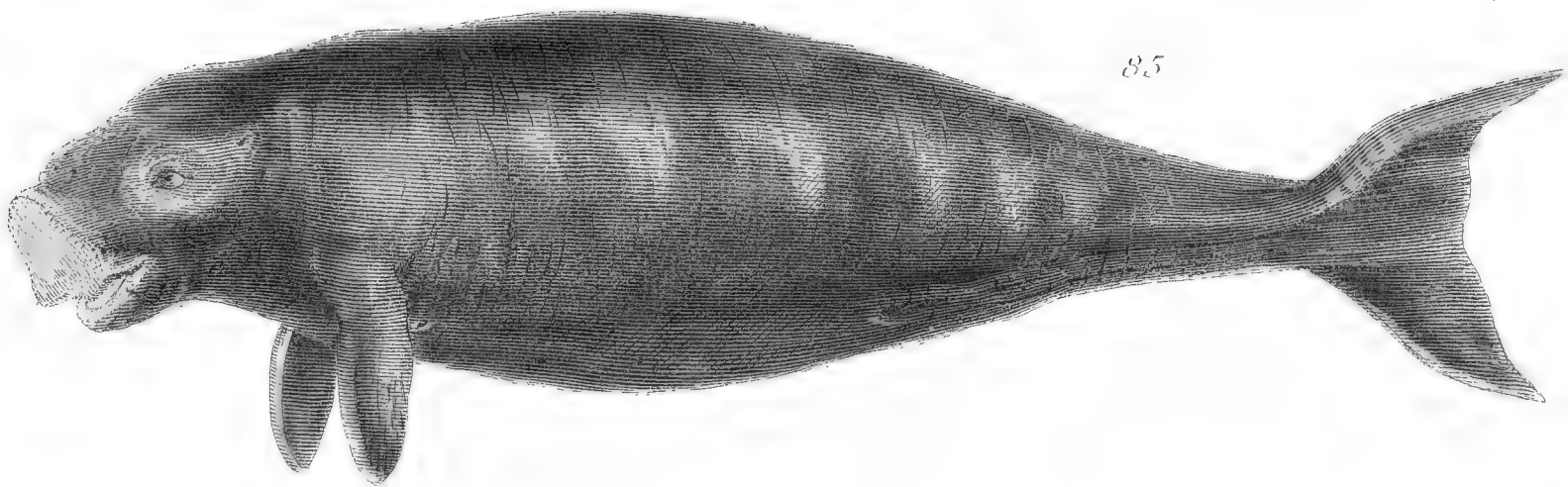
Order, Cetacea.

Genera, Manatus, Halicore, Rhytina

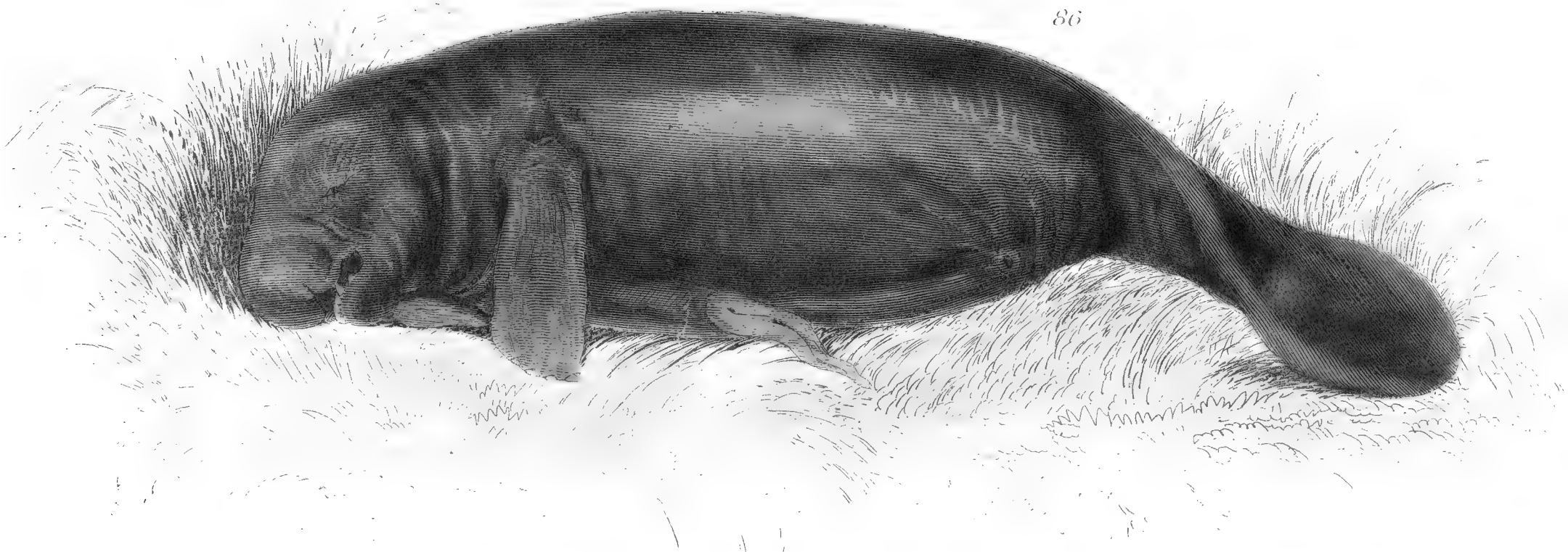
Families { Manatidæ.  
Rhytinidæ.



*M. Australis*. — American Manatee.



*H. Dugong*. — Dugong.



*R. Stelleri*. — Steller's Rhytina. (Young.)



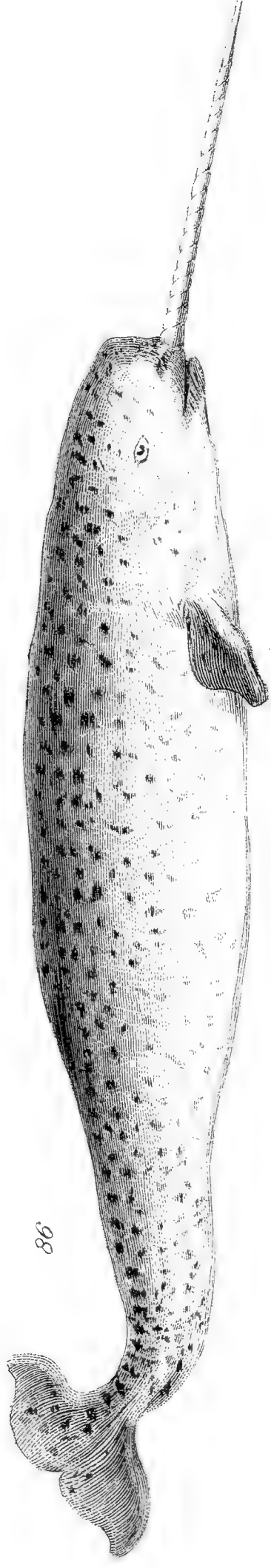
Order, Cetacea

Genera. Monodon, Physeter.

Delphinidæ.

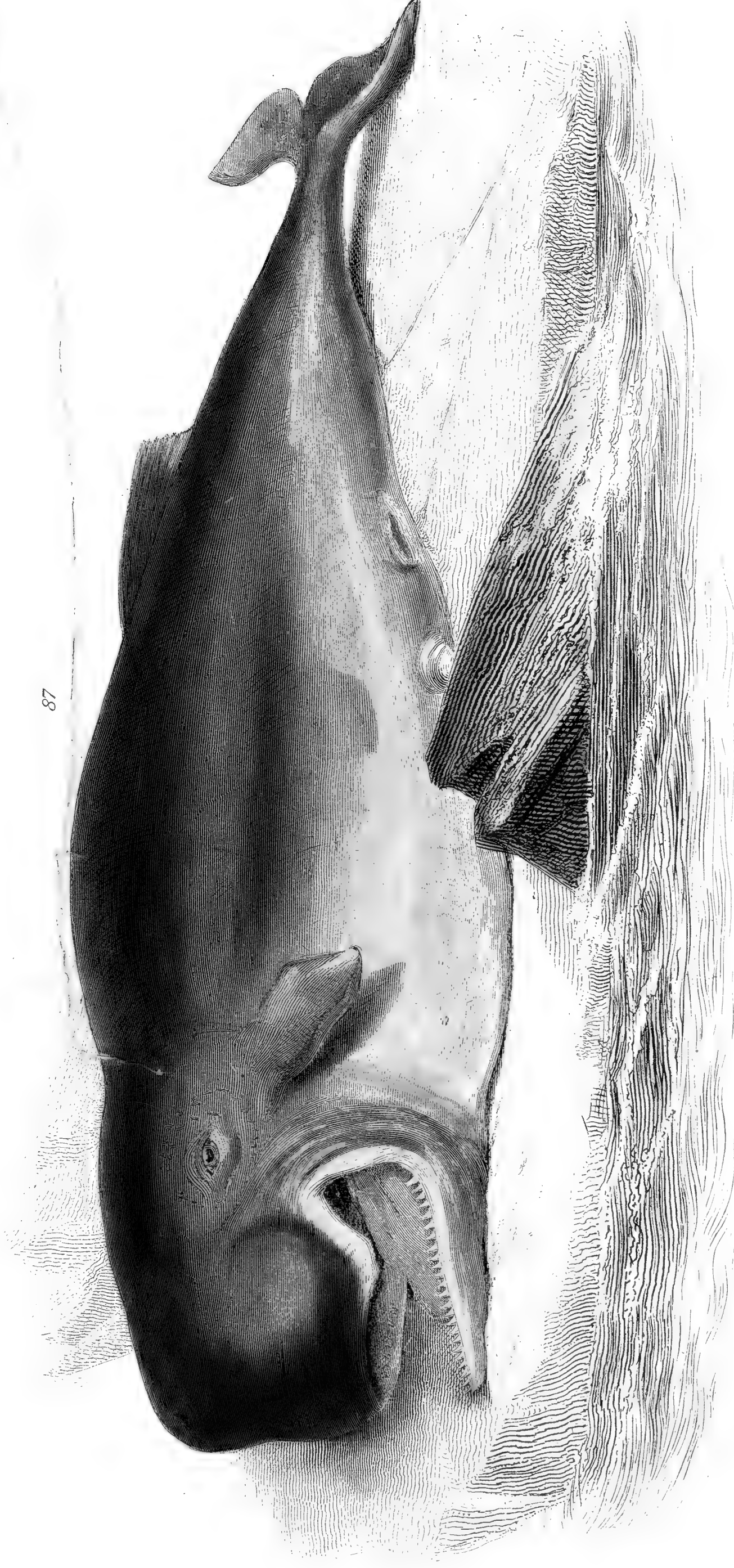
Families

Physeteridæ.



86

*Monodon monoceros*.—Narwhal



87

*Physeter macrocephalus*.—Cuvier's Beaked Whale.





Order, Cetacea

Genera. Delphinus, Balaena.

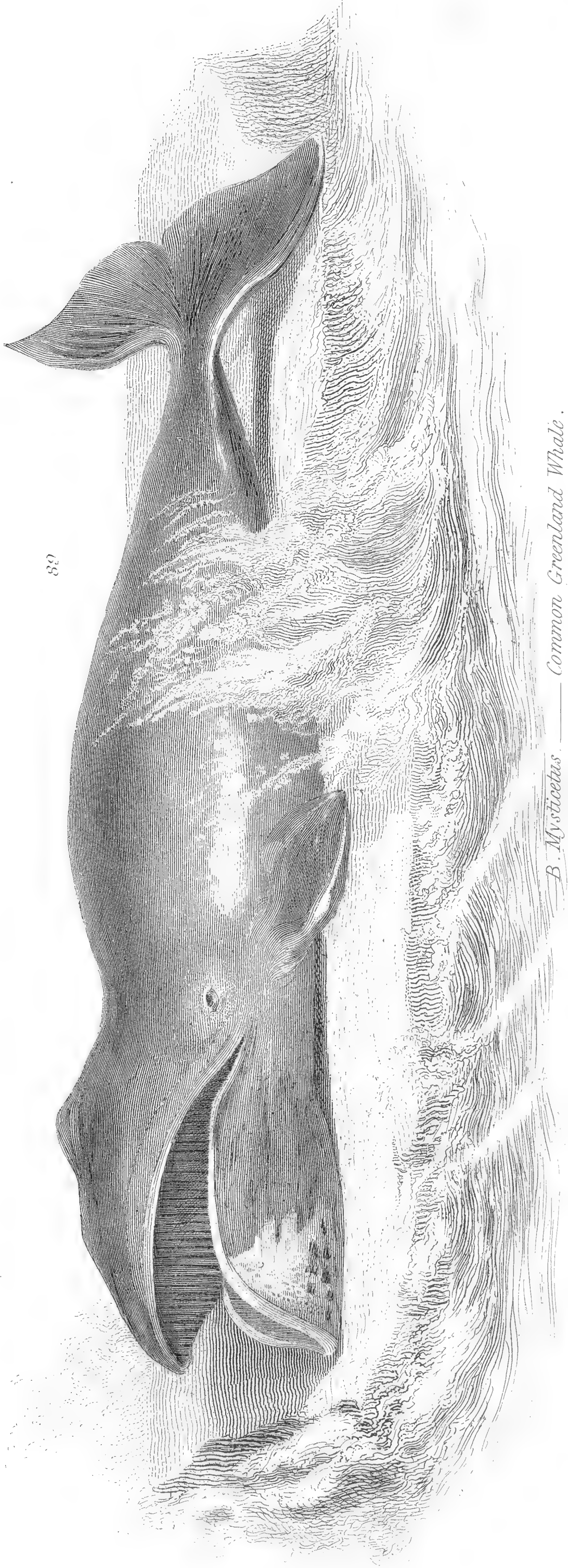
Families  
Delphinidæ.  
Balænidæ.

88



*D. Delphis.*—*Dolphin*

89



*B. Mysticetus.*—*Common Greenland Whale.*





# MAMMALIA

Order: Marsupialia.

Genera. *Hypsiprymnus*, *Macropus*, & *Phascodomys*.

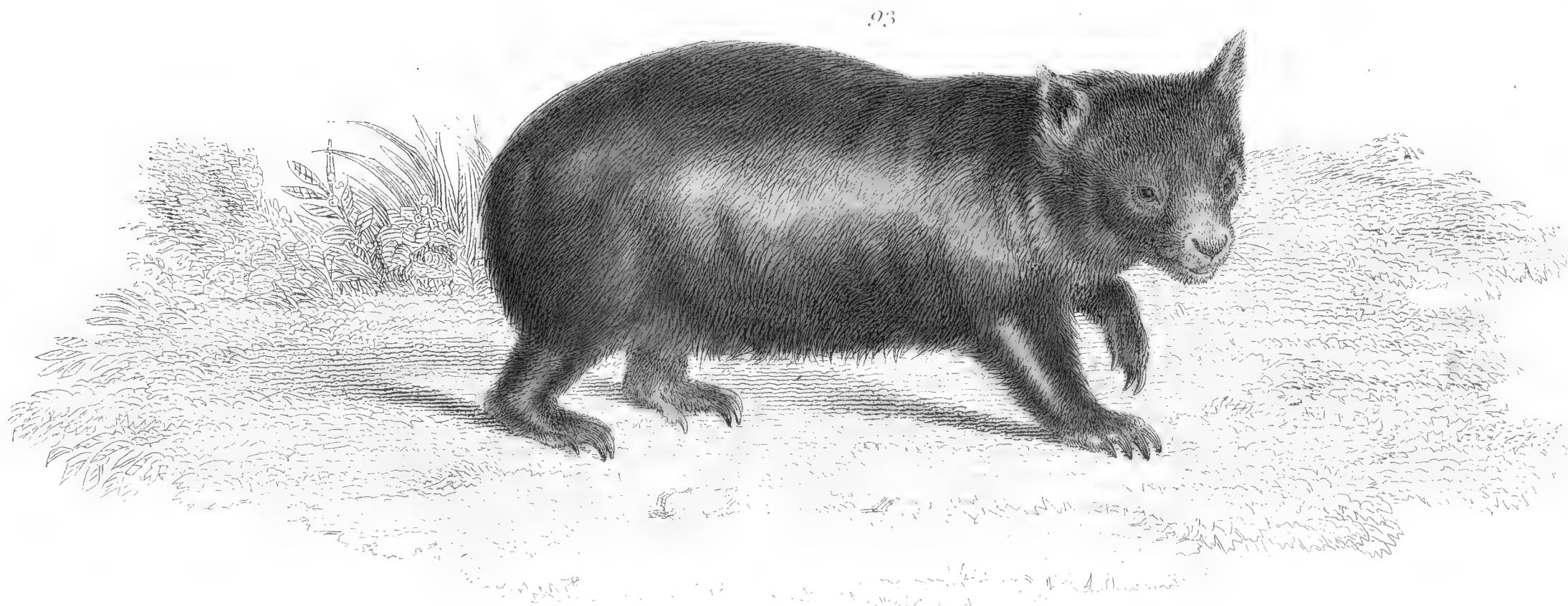
Families { *Macropodidæ*  
*Phascodomidæ*



*Hyp. minor* — Potoroo, or Kangaroo Rat.



*M. giganteus* — Great Kangaroo.



*P. ursinus* — Wombat.





Order Marsupialia.

Genera. Phalangista. Perameles. Didelphis.

Families {  
Phalangistidæ.  
Peramelidæ.  
Didelphidæ.



*Didelphis virginiana. Virginian Opossum.*



*Phal. gliriformis. Mouse like Phalangist.*



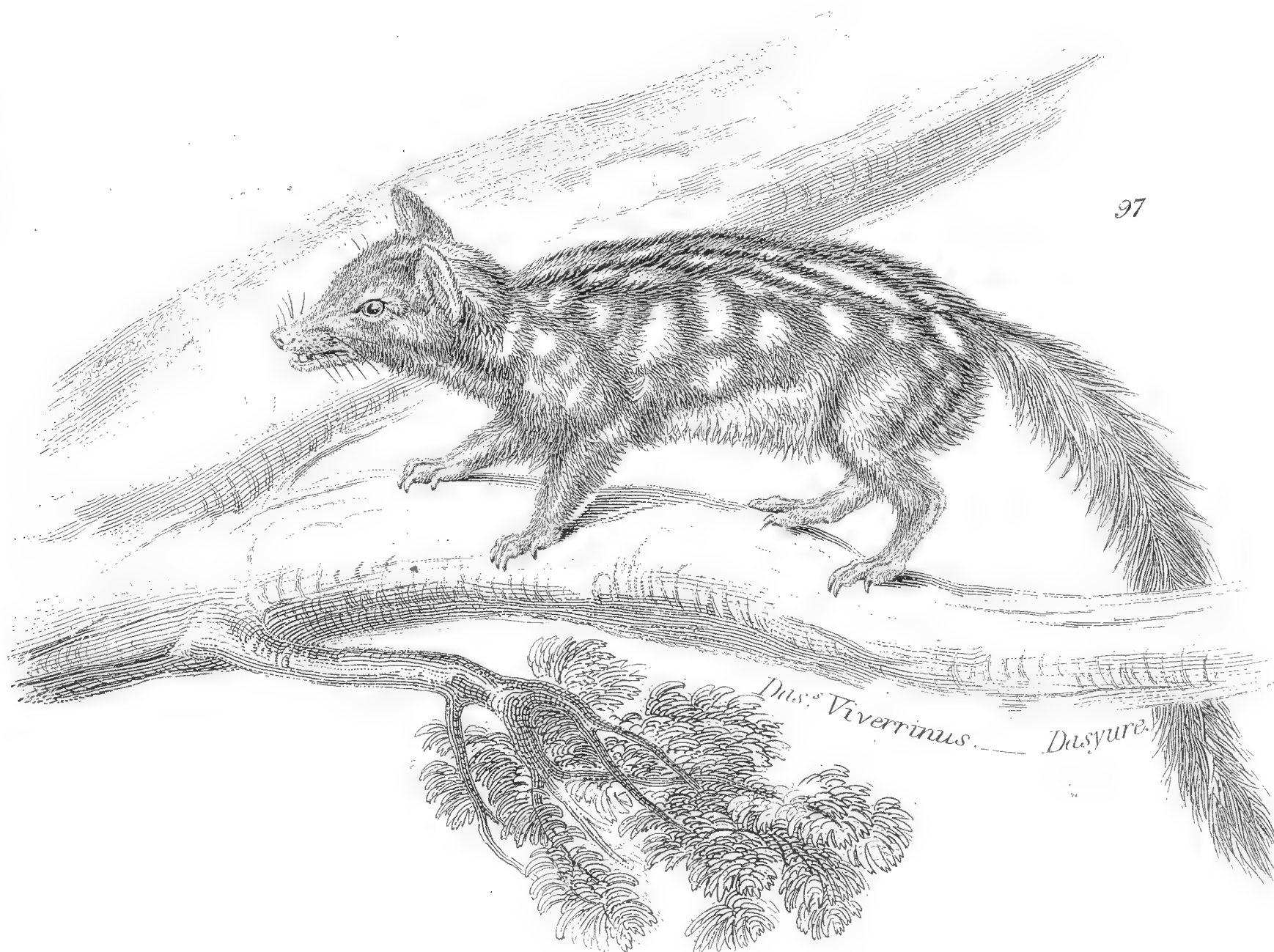
*Per. Obesus. Spiny Bandicoot.*



Order. Marsupialia.

Family. Dasyuridæ.

Genera. Dasyurus.



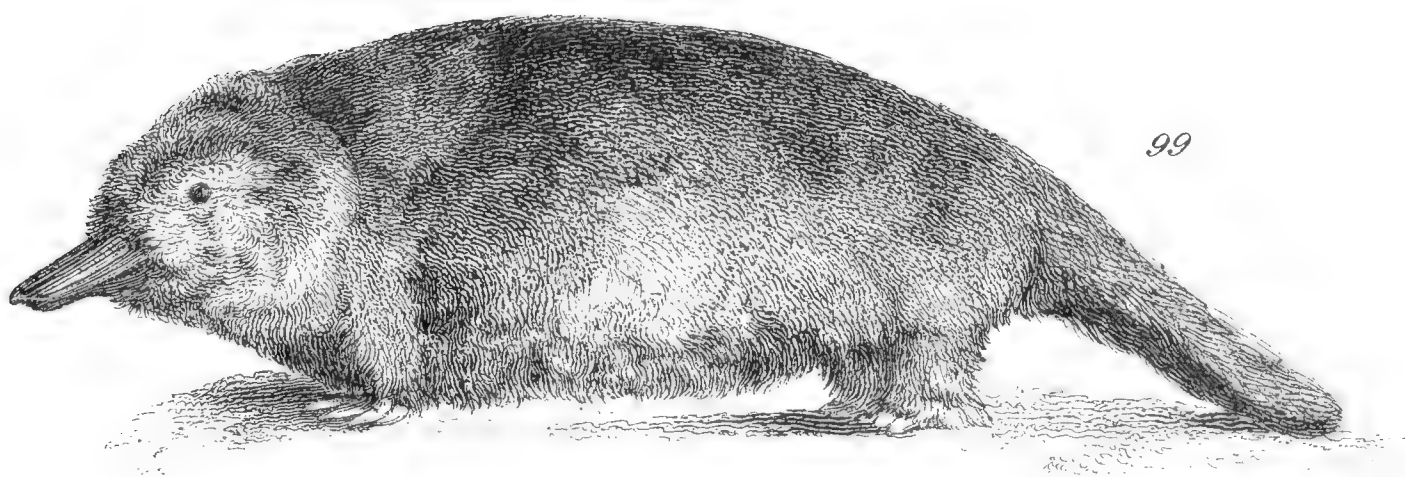
Order. Monotremata.

Genera. Echidna, Platypus

Families { Echidnidæ.  
Ornithorhynchidæ.



*E. Hystrix. Porcupine Ant-eater.*



*P. Anatinus. Duck-billed Platypus.*

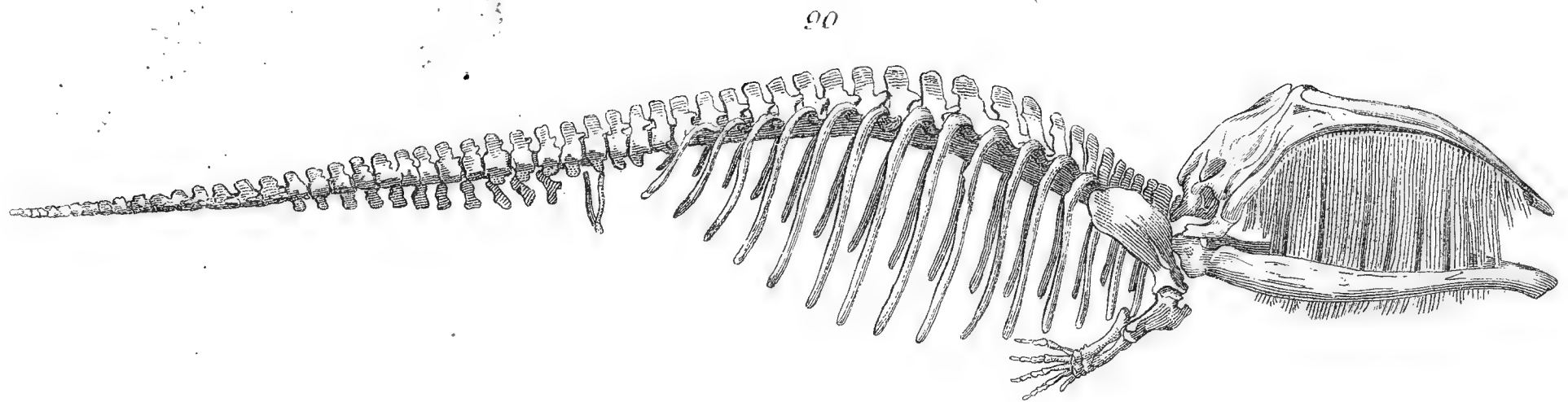




Order. Cetacea.

Genera. Balæna.

Family. Balænidæ.

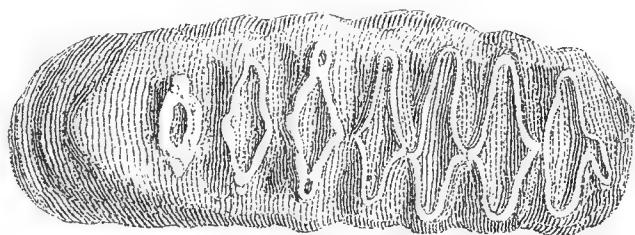


B Mysticetus. — Skeleton of Greenland Whale.

Order. Pachydermata.

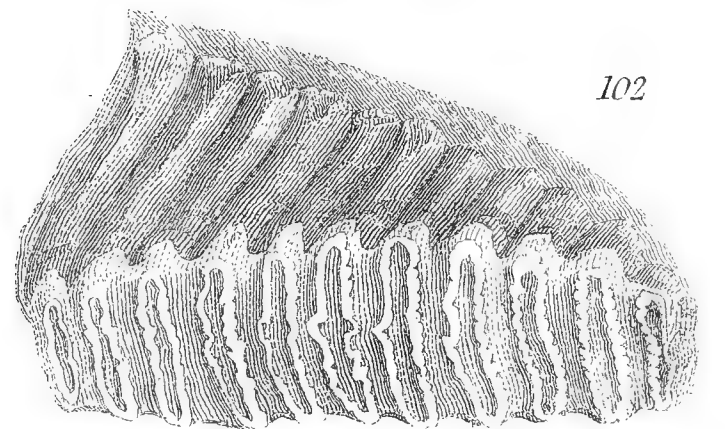
Genus. Mastodon.

101



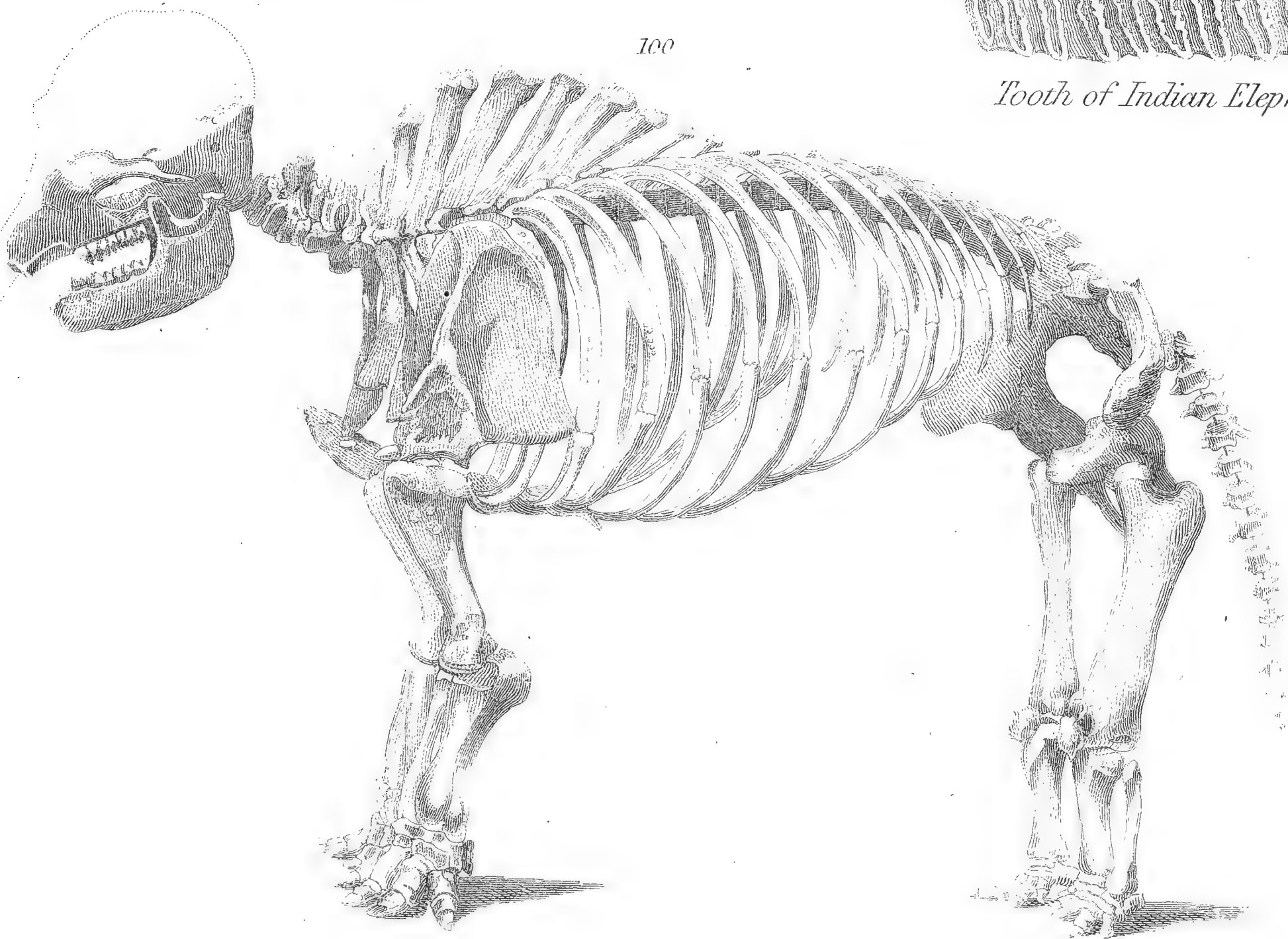
Tooth of African Elephant.

102



Tooth of Indian Elephant.

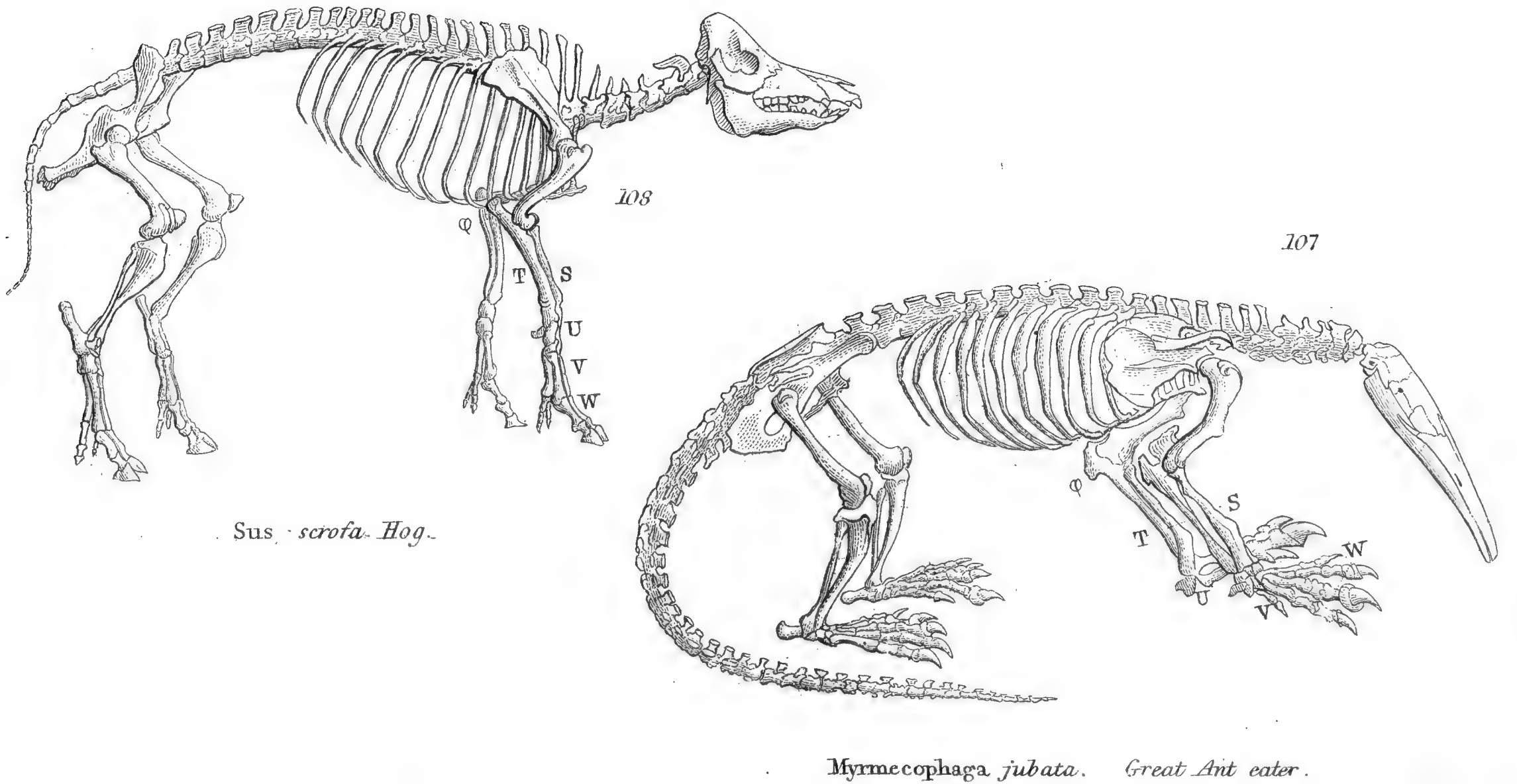
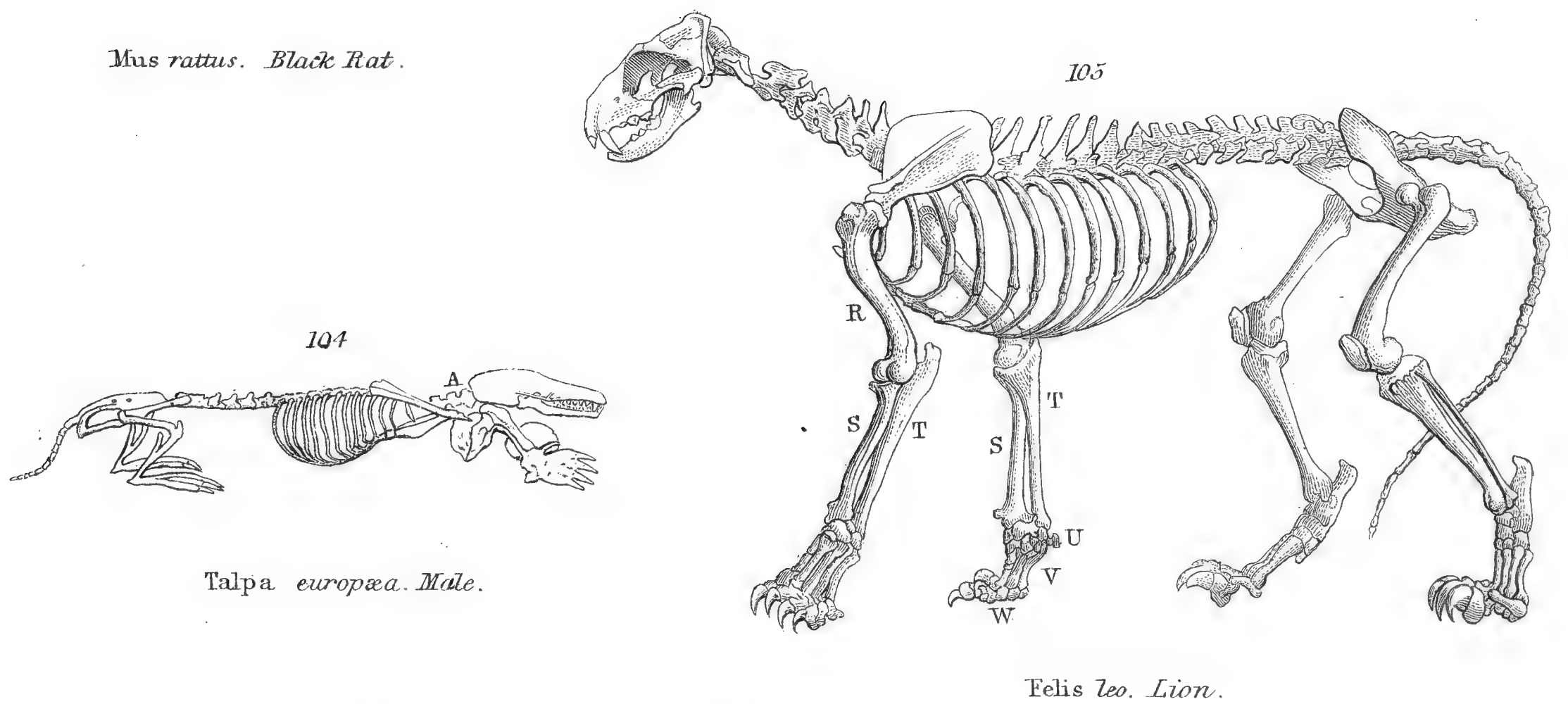
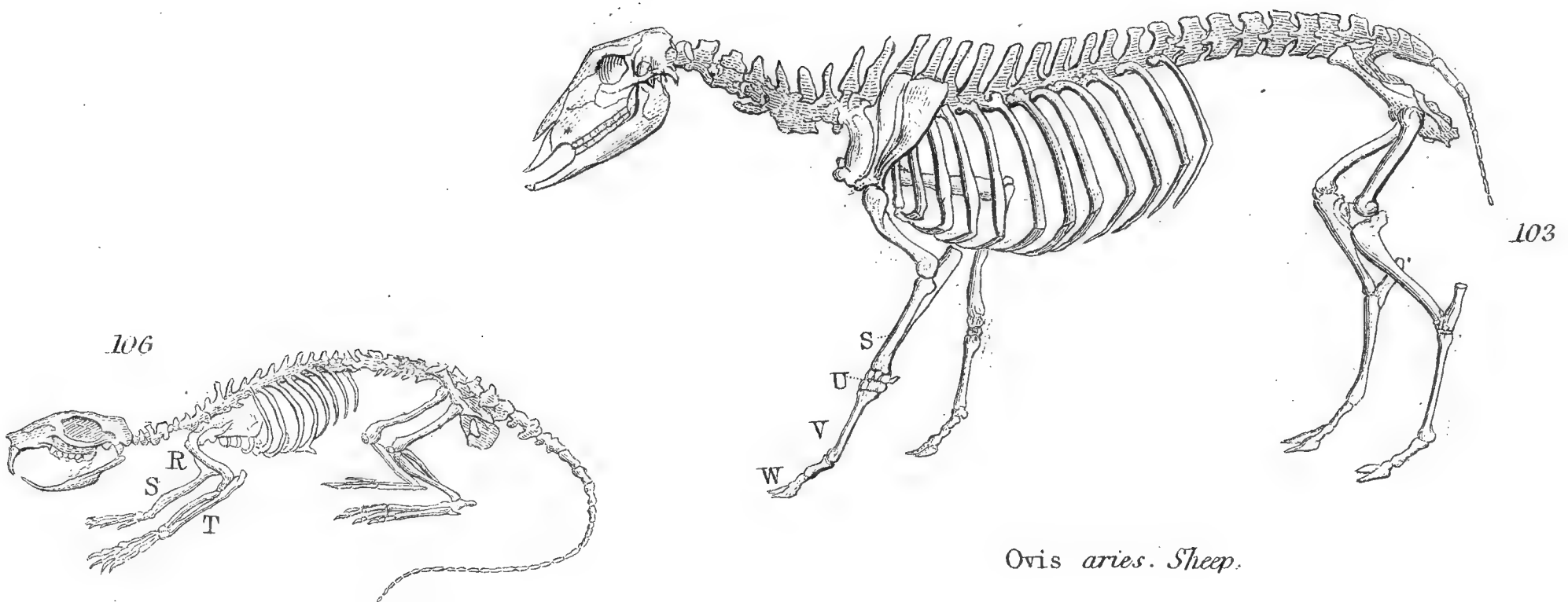
100



*M. Giganteum*. Gigantic Mastodon.



SKELETONS OF BEASTS.







SKELETONS OF BEASTS.

